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BOTANICAL MAGAZINE;

OR

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In which the most Ornamental FOREIGN PLANTS cultivated in the Open Ground, the Green-House, and the Stove, are accurately represented and coloured.

To which are added,

THEIR NAMES, CLASS, ORDER, GENERIC AND SPECIFIC CHARACTERS,

ACCORDING TO THE SYSTEM OF LINNÆUS;

Their Places of Growth, Times of Flowering, and most approved Methods of Culture.

CONDUCTED

By SAMUEL CURTIS, F. L. S.

THE DESCRIPTIONS

By SIR WILLIAM JACKSON HOOKER, K. H.

LL D. F. R. A. and L. S. Director of the Royal Botanic Garden of Kew.

VOL. XIV.

OF THE NEW SERIES;

Or Vol. LXVII. of the whole Work.

" Herbs and Flowers, the beauteous birth
Of the genial womb of earth,
Suffer but a transient death
From the Winter's cruel breath.
Zephyr speaks; serener skies
Warm the globe, and they arise."

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TO

MRS. WRAY,

OF OAKFIELD, CHELTENHAM,

A LADY,

WHO DERIVES SOME OF THE TRUEST PLEASURES FROM HER

EXTENSIVE AND SUCCESSFUL CULTIVATION OF

EXOTIC PLANTS;

AND TO WHOM THE PAGES OF THIS WORK

ARE MUCH INDEBTED FOR THE INTRODUCTION OF MANY NOVELTIES

AND RARITIES,

THE PRESENT VOLUME IS RESPECTFULLY INSCRIBED,

BY HER OBLIGED FRIEND

AND SERVANT,

THE AUTHOR.

ROYAL BOTANIC GARDEN, KEW,

June 1st, 1841.

W.J.H. del.º

Pub by S. Curtis Glazenwood Essex May 1 1840

Solánum crispum. Wavy Solanum.

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Class and Order.

Pentandria Monogynia.

(Nat. Ord.—Solaneæ.)

Generic Character.

Calyx monophyllus, persistens. *Corolla* monopetala, rotata. *Antheræ* oblongæ, apice poris duobus dehiscente. *Bacca* bi- tri- quadrilocularis. *Spr.*

Specific Character and Synonyms.

Solanum *crispum ;* fruticosum, foliis petiolatis ovatis acutis vel acuminatis undulatis integerrimis, corymbis terminalibus, calycibus tomentosis lobis quinque brevibus, corolla rotata profunde quinqueloba lobis ovatis undulatis, antheris æqualibus.

Solanum crispum. *Ruiz et Pav. Fl. Peruv. v. 2. p.* 31. *Dunal, Solan. p.* 159. *Syn. p.* 16. *n.* 78. *Roem. et Sch. Syst. Veget. v.* 4. *p.* 595. *Spreng. Syst. Veget. v.* 1. *p.* 681. *Lodd. Bot. Cab. t.* 1959. *Lindl. Bot. Reg. p.* 1516.

Apparently a frequent inhabitant of Chili, growing in waste places ; as at Conception, Carcamo, and Palomares, and also in the island of Chiloe, whence it seems to have been introduced to our gardens by Mr. Anderson. It was suspected it would prove a hardy plant: and such is the case even as far north as the Highlands of Argyleshire, where, in the gardens of James Hunter, Esq., of Hafton, a most indefatigable Horticulturist, there is a plant which has attained to a height of from twelve to fourteen feet upon a south wall. It has braved the unusually severe winters of 1837—8 and 1838—9, and it is hardly possible to conceive any thing more beautiful than the numerous purple corymbs, backed by the copious dark foliage, which the

the plant produces throughout the summer months. It strikes very freely from cuttings. Our drawing was made a few years ago from a comparatively small individual in the greenhouse of the Glasgow Botanic Garden. As an additional recommendation to the cultivation of this plant, the flowers are fragrant; though heavy if too strongly inhaled.

Descr. *Stem* woody; young *branches* herbaceous, green, terete, glabrous. *Leaves* alternate, petiolate, ovate, acute or acuminate, the base obtuse, rarely subcordate, the margins entire, waved. *Petiole* from half an inch to an inch long. *Corymbs* on terminal, leafless *branches;* large when cultivated successfully, handsome. *Pedicels*, at first, curved downwards, so that the buds are drooping. *Calyx* cup-shaped, cut into five short, acute, spreading lobes, downy on the outside. *Corolla* an inch or more in diameter, rotate, cut almost to the base into five horizontal, waved segments, of a palish purple, marked with a central streak of red. *Anthers* connate, five, yellow, on short, white *filaments*. *Style* protruded beyond the anther-tube.

Fig. 1. Flower. 2. Calyx and Pistil:—*magnified.*

W. Fitch del.

Pub by S. Curtis Glazenwood Essex May 1. 1840.

Swan Sc.

MONACHÁNTHUS ROSEO-ÁLBUS. WHITE AND ROSE-COLORED MONK-FLOWER.

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Class and Order.

GYNANDRIA MONANDRIA.

(Nat. Ord.—ORCHIDEÆ.)

Generic Character.

Perianthium explanatum. *Sepala* et *petala* æqualia, deorsum versa. *Labellum* posticum, carnosum, indivisum, ventricosum, sepalis multo majus. *Columna* brevis, crassa, mutica. *Antheræ* et *pollinia* Cataseti.—*Epiphytæ* Cataseti *habitu. Lindl.*

Specific Name and Character.

MONACHANTHUS *roseo-albus;* labello triangulari acutissimo concavo-hemisphærico (non ventricoso) intus pubescente margine basi longissime ciliato.

Several pseudo-bulbs of this remarkable and very pretty plant were sent from Pará, in Brazil, to Mr. MURRAY of the Glasgow Botanic Garden in the early part of last year by Mr. CAMPBELL, and there is scarcely any period since, that some or other of them have not been throwing up the flowering-stems, and exhibiting their delicate blossoms of a white colour, the lip, tipped with red and banded with the same colour in the inside, while the margin at the base has a deep red fringe much longer than in any species I have ever seen. It will be seen that I have preserved the generic name of MONACHANTHUS, rather from consistency than a conviction of the soundness of the Genus. It might with greater propriety be called CATASETUM, Sect. MONACHANTHUS.

Pseudo-bulbs a span and more long, clustered, oblong, tapering at both ends, annulated. *Leaves* lanceolate, six to

to eight inches long, thin, membranaceous, with numerous elevated striæ, and tipped with a short acumen.

Scape from the base of the bulb, erect, two feet high, if we include the long *raceme* of many (twenty to thirty) *flowers*. *Sepals* linear-lanceolate, white tinged with red, soon closely reflexed; *petals* longer and broader, standing both of them erect over the column and parallel, their margins only reflexed, white. *Lip* deflexed, the smallest of the Genus; as viewed in front exactly triangular, with a very acute point, the margin near the column fringed with remarkably long, coarse hairs or bristles, the disk concave, so that seen on the underside it is hemispherical (not by any means ventricose): within downy, the bands, the acute apex of the lip, and the fringe all red, the rest white. *Column* short and thick, much shorter than the lip. *Anther-case* hemispherical. *Pollen-masses* as in CATASETUM. *Stigmatic surface* of the column becoming black soon after the anther-case has fallen off.

Fig. 1. Flower. 2. Pollen-masses:—*magnified.*

1

2.

W. Fitch Delt.

Pub. by S. Curtis, Glazenwood Essex May 1. 1840.

Swan Sc.

MANDEVÍLLA SUAVÉOLENS. SWEET-SCENTED MANDEVILLA.

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Class and Order.

PENTANDRIA DIGYNIA.

(Nat. Ord.—APOCYNEÆ.)

Generic Character.

Calyx pentaphyllus, imbricatus, erectus, intus annulo pectinato auctus. *Corolla* hypogyna, campanulato-infundibuliformis, fauce tuboque esquamatis, limbi 5-fidi laciniis subæquilateris. *Stamina* 5, basi corollæ tubi inserta: *antheræ* in conum circa stigma conniventes, apice membranaceæ. *Ovarium* biloculare, polyspermum. *Stylus* unus; *stigma* conicum, a latere 5-foveatum, basi campanulatum 5-lobum, apice bicuspidatum. *Annulus* hypogynus 5-lobus, carnosus. *Fructus* .....—Frutex *Bonariensis (?) volubilis, foliis petiolatis membranaceis, stipulis pectinatis, racemis secundis axillaribus multifloris. Lindl.*

Specific Name and Synonym.

MANDEVILLA *suaveolens.*
MANDEVILLA suaveolens. *Lindl. Bot. Reg.* 1840, *t.* 7.

I had long possessed specimens of this plant in my Herbarium, where I had referred it to ECHITES; and having received recent flowering ones from the Horticultural Society of Edinburgh, from which the accompanying figure was taken in October, 1839, I was on the point of publishing it as an ECHITES when the plate above quoted appeared, where Professor LINDLEY has constituted of it a new Genus, under the name of MANDEVILLA, in compliment to HENRY JOHN MANDEVILLE, Esq., H. B. M. Minister at Buenos Ayres, "to whom we are indebted for the introduction of this and many other interesting plants." He considers it to differ

from

from Echites, first, by the form of the corolla, which is more like that of Beaumontia, than of Echites; and, secondly, by the presence of a pectinated ring between the bases of the calyx and corolla.—This pectinated ring we had unfortunately omitted to observe.—Its native country is not yet certainly known. Mr. Tweedie's remarks on my specimens in the Herbarium are, "This is one of our best climbers, only to be met with in gardens about Buenos Ayres, and called "*Chilian Jasmine.*" Its seed-pods are a foot to a foot and a half long, generally two hanging together. The seeds are long and bearded like those of Echites." From the name given to it at Buenos Ayres, it would appear to have been introduced from Chili; but we have seen nothing of the kind from that country. It is not considered to be hardy with us: and Dr. Lindley recommends that it should be cultivated in the conservatory, and observes that it is easily propagated by cuttings.

Descr. *Stem* fruticose, long, terete, climbing, glabrous. *Leaves* opposite, petiolate, ovato-cordate, entire, with a rather slender acumen, membranaceous, entirely glabrous above, beneath pale, copiously marked with brown reticulated veins, and bearing tufts of hair in the axils of the principal nerves. *Petioles* one to three inches long: between the opposite pairs on each side are several short, fleshy, filamentous stipules. *Peduncles* axillary, elongated, bearing a corymb of large, white or somewhat cream-coloured, fragrant *flowers*. *Calyx* five-partite, the laciniæ lanceolate and erect. *Corolla* funnel-shaped, the limb of five, broadly-ovate or subrotund, wavy, imbricated, spreading lobes. Within, the lower part of the tube is thickly clothed with hairs, above which the five nearly sessile, connate, linear-oblong, included, yellow *anthers* are inserted, covering and concealing the *stigma*. *Ovaries* two, surrounded by a five-lobed, hypogynous disk, and tapering into a single *style*, which bears a very large, green, fleshy, extinguisher-shaped *stigma*.

Fig. 1. Lower part of the Tube of the Corolla, with Stamens. 2. Pistils: *magnified.*

Pub. by S. Curtis Glazenwood Fisson May 1. 1840

Grevíllea dúbia. Dubious Grevillea.

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Class and Order.

Tetrandria Monogynia.

(Nat. Ord.—Proteaceæ.)

Generic Character.

Perianthium irregulare; foliolis laciniisve secundis: apicibus cavis staminiferis. *Antheræ* immersæ. *Glandula hypogyna* unica, dimidiata. *Ovarium* dispermum. *Stigma* obliquum depressum (raro subverticale, conicum). *Folliculus* unilocularis, dispermus, loculo centrali. *Semina* marginata, v. apice brevissime alata. *Br.*

Specific Character and Synonyms.

Grevillea *dubia;* foliis ellipticis marginibus refractis, ramis ramulisque tomentosis, floriferis racemoque abbreviato recurvis, pistillis uncia brevioribus. *Br.*

Grevillea dubia. *Brown in Linn. Trans.* 10. 169. *Ibid. Prodr.* 1. 376. *Roem. et Schult. Syst. Veget.* 3. 410.

Mr. Brown considers this plant scarcely specifically distinct from his Grevillea *punicea;* Rœmer and Schultes repeat the doubt, and Sprengel unites them; but these writers have probably no additional information on the subject. A specimen which I received from New Holland without name in 1824, and which I considered G. *punicea*, is distinguished from this by its leaves being broader, larger, and minutely dotted, but otherwise glabrous on the upper surface, where also the marginal nerves are less conspicuous; the raceme too is less dense, and the style longer. Our plant was raised at the Botanic Garden, Edinburgh, from seeds sent by Mr. Cunningham as a new species, and has flowered freely in the end of the season, during several years.

Descr. *Shrub* (five feet high) erect, with pendulous branches, twigs covered with brownish pubescence, hairs adpressed, attached by the middle. *Leaves* elliptical or obovato-elliptical, mucronulate, spreading, having adpressed pubescence, similar to that on the twigs on both sides, but silky and chiefly abundant below, lateral nerves near the margins. *Racemes* short, dense, terminal, becoming lateral, and opposite to the leaves, from the prolongation of the branches. *Bracteæ* subulate, falling very early. *Flowers* rose-coloured, geminate, on recurved pedicels, the lowest expanding first; *perianth* pubescent on the outside, four-phyllous, united in the throat by a dense tuft of white wool, less than half the length of the revolute limb, which on the inside is glabrous. *Stamens* small, white, sessile in the apices of the perianth. *Pistil* pedicellate, including the pedicel less than eight lines long, surrounded at its base on the lower side by a pale, semilunar disk, everywhere glabrous except at the top of the style, where it is slightly pubescent: *stigma* oblique, flat; *germen* green, obscurely furrowed above and below. *Graham.*

1.

2.

Pub by S Curtis Glazenwood Essex Mail 1840

VERBÁSCUM TÁURICUM. TAURIAN MULLEIN.

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Class and Order.

PENTANDRIA MONOGYNIA.

(Nat. Ord.—SCROPHULARINÆ.)

Generic Character.

Calyx 5-fidus. *Corolla* rotata, limbo inæqualiter lobato. *Filamenta* subbarbata. *Antheræ* difformes. *Capsula* valvis inflexis, dissepimentum formantibus in placentas incrassatis. *Spr.*

Specific Name and Character.

VERBASCUM *Tauricum;* subpubescens, foliis cordato-ovatis grosse crenato-lobatis reticulatis submembranaceis inferioribus petiolatis, petiolo brevi, superioribus multo minoribus magis cordatis sessilibus, racemis elongatis, pedicellis solitariis v. geminis bracteas æquantibus, (floribus purpureis).

VERBASCUM Tauricum. *Hortulan.*

If this very handsome MULLEIN, which was kindly communicated from the open border of the Edinburgh Botanic Garden, by Dr. GRAHAM, be anywhere described under the name with which it was received, I have no means of access to that description; nor will I, knowing how liable the Genus is to mix with other species, pronounce that the present is of a genuine stock. I publish it with the name which accompanied the specimen, and under which it was probably sent from the German gardens to Dr. GRAHAM. Its nearest affinity with any acknowledged species is, perhaps, with V. *phæniceum,* Bot. Mag. t. 885; but the pedicels are very much shorter, in which respect it approaches V. *cupreum* (Bot. Mag. t. 1226), a supposed hybrid, from which again it differs in the colour and size and markings of the flower. It blossomed in August, 1839.

Descr. *Root* probably biennial. *Stem* erect, terete, branched, downy, the branches upright. *Lower leaves* large, ovate, cordate at the base, rather thin and membranaceous, reticulated, petiolated, with very large coarse serratures, they may almost be called lobes, at the margin. *Petioles* short and, except of the radical leaves, broad. The leaves gradually become smaller upwards, more cordate, and at length sessile. *Raceme* eight to ten inches, or a foot long. *Flowers* rather closely placed, solitary or two together. *Pedicels* two to three lines long, equal in length with the narrow almost subulate bracteas, reddish. *Calyx* hairy, of five deep, lanceolate, spreading segments. *Corolla* moderately large, rotate, the segments unequal, broad, and rounded, purple, deeper and almost blackish at the base, with a yellow ring. *Stamens* unequal. *Filaments* deep purple, with long purple, spreading hairs, yellow and naked at the base. *Anther* reniform, dark purple. *Pollen* deep golden colour. *Style* red, a little thickened upwards. *Stigma* capitate, green.

Fig. 1. Calyx with Pistil. 2. Stamens :—*magnified*

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EPIDÉNDRUM PÁTENS. SPREADING-FLOWERED EPIDENDRUM.

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Class and Order.

GYNANDRIA MONANDRIA.

(Nat. Ord.—ORCHIDEÆ.)

Generic Character.

Sepala patentia subæqualia. *Petala* sepalis æqualia vel angustiora, rarius latiora, patentia vel reflexa. *Labellum* cum marginibus columnæ omnino vel parte connatum, limbo integro vel diviso, disco sæpius calloso, costato vel tuberculato ; nunc in calcar productum, ovario accretum et cuniculum formans. *Columna* elongata ; clinandrio marginato, sæpe fimbriato. *Anthera* carnosa, 2—4-locularis. *Pollinia* 4, caudiculis totidem replicatis annexa.—Herbæ *epiphytæ (Americanæ), caule nunc apice v. basi pseudo-bulboso, nunc elongato apice folioso.* Folia *carnosa, rarissime venis elevatis striata.* Flores *spicati, racemosi, corymbosi vel paniculati, terminales vel laterales.* *Lindl.*

Specific Character and Synonyms.

EPIDENDRUM *patens ;* caule tereti, foliis distichis oblongo-lanceolatis, sepalis petalisque subæqualibus oblongis acutis convexis patentibus, labello trilobo lobis deflexis, lateralibus subrotundis, intermedio bifido.

EPIDENDRUM patens. *Swartz, Fl. Ind. Occ. p.* 1495. *Spreng. Syst. Veget. v.* 3. *p.* 757. *Lodd. Bot. Cab. t.* 1537. *Lindl. Gen. et Sp. Orchid. p.* 108.

From the Glasgow Botanic Garden, where it flowered in July, 1839. It is a native of Jamaica and Trinidad, and probably of other of the West Indian islands.

DESCR. *Stem* a foot, or a foot and a half high, terete, jointed, bare of leaves below, leafy above. *Leaves* oblongo-lanceolate,

lanceolate, somewhat coriaceous, distichous, and more or less reflexed, acute, exhibiting no nerves, sheathing the stem with the base. *Peduncle* from the apex of the stem, deflexed, rounded, bearing *flowers* almost from the base. These are moderately large, greenish-white when young, cream-coloured when fully expanded, and then soon becoming tinged with reddish-brown, as shown in LODDIGES' figure. *Petals* and *Sepals* nearly equal and uniform, oblong, acute, spreading horizontally, the margins deflexed, so that the upper side is convex or semiterete. *Column* short, clavate. Free portion of the *lip* cut into three nearly equal lobes, the sides or margins deflexed, so as to be convex above, with two tubercles at the base, very concave beneath: the side lobes roundish, entire, the intermediate lobe bifid, the laciniæ rather spreading, obtuse.

Fig. 1. Upper side of the Column and Lip. 2. Under view of ditto:—*magnified.*

Miss Dally Del!

Pub. by S. Curtis, Glazenwood, Essex. June 1. 1840

Fúchsia fúlgens. The Glowing Fuchsia.

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Class and Order.

Octandria Monogynia.

(Nat. Ord.—Onagrarieæ.)

Generic Character.

Calycis tubus basi ovario adhærens, supernè productus in tubum cylindraceum 4-lobum post anthesin articulatim deciduum. *Petala* 4 summo tubo inserta, lobis alterna, rariùs 0. *Stamina* 8. *Ovarium* glandula urceolata coronatum. *Stylus* filiformis. *Stigma* capitatum. *Bacca* oblonga aut ovato-globosa, 4-loc., 4-valv., polysperma.—Frutices. Folia *sæpius opposita.* Pediculi *axillares* 1-*flori, interdum ad apices ramorum racemosi.* Flores *sæpius nutantes, rubri rarius albi, interdum* 5-*fidi,* 10-*andri.*

Specific Character and Synonyms.

Fuchsia *fulgens;* ramis glabris, foliis oppositis cordato-ovatis acutis denticulatis glabris, pediculis axillaribus flore brevioribus superioribus racemosis, calycis lobis ovato-lanceolatis acutis petala acutiuscula superantibus. *D. C.*

Fuchsia fulgens. *De Cand. Prodr. v.* 3. *p.* 39. *Lindl. Bot. Reg.* 1838, *t.* 1. *Bent. Plant. Hartweg.*

A comparatively recent introduction to this country, from Mexico;—now become common in our gardens, on account of its easy culture and the great beauty of its graceful, pendent racemes of long, scarlet flowers. The leaves however, it must be confessed, are coarse and weedy looking, very different from the neat and glossy foliage of Fuchsias in general, and detract somewhat from the charm of the plant. It is too delicate to bear the winters in our climate;—but it may readily be raised by seeds or cuttings, and

and young plants placed in the open border in the early summer will continue to flower till the autumnal frosts come on. Mr. Curtis, at his extensive Nursery of Glazenwood, (where this very beautiful drawing was made by Miss Dally, in the summer of 1839,) has succeeded in producing a great number of hybrids, by means of other species, and flowers of all kinds are the result, from the balloon form of the Fuchsia *globosa*, to the peculiarly elongated figure here represented.

Descr. *Stem* rather herbaceous and succulent than woody, terete, glabrous, more or less tinged with red. *Leaves* large, ovate or cordato-ovate, soft and flaccid, toothed at the margin, glabrous; *petiole* short, thick, tinged with red, as are the veins of the leaf, especially beneath. *Flowers* in long, terminal, pendulous, leafy *racemes; leaves* small, otherwise similar to those of the main branches. *Pedicels* slender. *Ovary* and young *fruit* elliptical, downy. *Calyx* bright red tipped with greenish, infundibuliform: *tube* very long, slender; *limb* of four erect, acuminated segments. *Petals* shorter than the calyx-segments, deep scarlet. *Stamens* included. *Style* longer than the calyx. *Stigma* capitate.

We take this opportunity of mentioning, that the Mandevilla *suaveolens*, figured at Tab. 3797, was not, as there intimated, raised by Mr. James M'Nab, at the Horticultural Society's Garden of Edinburgh; but by Mr. James Macintosh, gardener to Mrs. Ferguson, at Archerfield, East Lothian, and by him it was kindly communicated to us through Mr. M'Nab.

W Fitch Del.t

Pub by S. Curtis, Glaxenwood, Essex. June1. 1840.

MYÁNTHUS SPINÓSUS. SPINE-BEARING FLY-WORT.

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Class and Order.

GYNANDRIA MONANDRIA.

(Nat. Ord.—ORCHIDEÆ.)

Generic Character.

Perianthium explanatum. *Sepala* libera, æqualia, lateralibus paululum adscendentibus. *Petala* conformia, angustiora, sepalo supremo supposita. *Labellum* planum, obovatum, tridentatum, sepalis brevius. *Columna* erecta, teres, basi bicirrhosa, postice ad cardinem antheræ longe producta. *Antheræ* et *pollinia* Cataseti.—*Epiphyta*, Cataseti *omnino vegetatione*. *Lindl.*

Specific Name and Character.

MYANTHUS *spinosus;* petalis versus apicem serratis, labelli infra medium saccati margine pilis tenuibus succulentis albis longe fimbriato apice anguste attenuato recurvo supra ad basin spina tripartita infra apicem spina magna dentata porrecta.

This new MYANTHUS is one of the very few ORCHIDEÆ which rewarded Mr. GARDNER's researches in the Province of Ceará in the interior of Brazil. "CACTEÆ," he says in his Journal, (see Ann. of Nat. Hist. v. 3. p. 334,) "are very scarce here; I have met with but four species, all of them similar to those that I had already despatched to England from the Rio San Francisco. ORCHIDEÆ are still more rare. Two kinds only can I find to send home alive, but of both you will receive an abundant supply; they are the ONCIDIUM already mentioned and the EPIPHYTE that grows on the *Catolé*. The latter of these I have not seen in flower, it being in a dormant leafless state at this season. The general appearance is that of a CATASETUM, and I have no

no doubt it will prove to be new. The place of the tropical Orchideæ of South Brazil, is in these regions occupied by Lorantheæ, which, in the shape of Viscum, occupy every tree, and being evergreen, give a remarkable appearance to the deciduous forests."—The "Catasetum-like Orchideæ," proves to be this Myanthus, whose lip exhibits an exquisitely beautiful structure. It flowered with us, for the first time, in February, 1840.

Descr. *Pseudo-bulbs* oblong, striated and transversely marked with the scars of fallen leaves and scales. The foliage has not yet made its appearance on our plants. *Scape* from the base of a pseudo-bulb, about a foot high, erect, and terminated by an erect *raceme* of many slightly fragrant, resupinate (that is, the lip being superior) *flowers*. *Sepals* linear-lanceolate, spreading, pale yellowish-green with blood-coloured blotches, *petals* similar to them in shape, but slightly serrated towards the points, standing parallel over the back of the column, and thus connivent with the superior sepal. *Lip* spreading, linear, grooved, saccate near the middle, the apex much attenuated and recurved, the *margins* beautifully fringed with white, flexuose, succulent hairs, greenish-white beneath, dotted with red, bearing on the upper side at the base an erect, three-partite spine or horn, and having a much larger, porrected one below the acumen, which is a little toothed or fimbriated. *Column* with a curved, much acuminated apex, and in front below the large *stigma* are two long, deflexed, and appressed, coloured setæ. *Ovary* purple, straight.

Fig. 1. Column, Petals, and Lip: *magnified.*

Pub. by S. Curtis, Glazenwood, Essex June 1. 1840

STENOMESSON LATIFOLIUM. WIDE-LEAVED STENOMESSON.

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Class and Order.

HEXANDRIA MONOGYNIA.

(Nat. Ord.—AMARYLLIDACEÆ. Subord. PANCRATIFORMES. §. 1. Semina testâ nigrâ.)

Generic Character.

Perianthium tubo subrecto mediâ parte constricto superne ventricoso, limbo brevi regulari, coronâ brevi; *folia* margine in oriundo retroflexè compresso hysteranthia.

Specific Character.

STENOMESSON *latifolium;* foliis superficie subrugosâ circiter sesquiunciam latis, scapo glaucescente 5-florâ 4—5-unciali, spathâ pallidâ ultra-unciali, pedunculis brevibus (circ. $\frac{3}{8}$-unc.), perianthio sesquiunciali tubi parte inferiore pallidâ, superiore cum limbo aurantiacâ, filamentis limbo longioribus stylo interdum elongato plerumque semunciam brevioribus.—Ex Limâ Angliam allatum. *W. H.*

This new species of STENOMESSON was sent to Spofforth by J. MACLEAN, Esq. from Lima, in November, 1837; and, having arrived in the spring of 1838, showed its leaves soon after, and flowered very early in the spring of 1839, and again in 1840, or, rather, towards the close of the winter, during its season of rest. The plants of this Genus like a pretty strong alluvial soil, with manure that is perfectly rotten, being naturally inmates of rich pastures or meadows. Their leaves are produced at the first accession of moisture after rest and drought, and are impatient of sunshine, from which they should be screened when it is ardent.

ardent. After their decay, the pot should be left dry, and the flower-scape will rise while it is yet unwatered. In their native country the leaves rise after the first rains, and decay when the heat becomes powerful, and the stems appear at uncertain periods during the season of rest. Mr. Maclean omitted to state the precise quarter from whence this species was obtained. They might be cultivated with us in any situation where their leaves were protected from snails and from scorching sun, and where the soil could be shielded from rain during the winter by some covering and kept perfectly dry. The same treatment, with a little more warmth, suits Urceolina, but it is equally impatient of sunshine, and, indeed, almost all petiolated Amaryllideæ are so. Griffinia and Hymenocallis with fleshy seeds have the margin of the young leaf inflexly, Pentlandia, Urceolina and Stenomesson with shelled seeds reflexly, compressed. *W. H.*

Fig. 1. Portion of a Staminal Crown *magnified.*

Amaryllidaceæ; § Hippeastriformes.

Sprekelia *cybister ;* scapo forti 4—5-floro, flore basi rubro superne subvirescente, perianthio laciniis basi latis superne longè angustatis reflexis, labio inferiore cum genitalibus basi comprehensis *precipitato,* sepalorum margine involuto, petalis duobus superioribus planioribus apice tortuosè demisso, imo scapum attingente. *Ex Boliviâ foliis hysteranthiis.* (Sprekeliæ § 2. Filamento sepalino superiore elongato, petalino imo abbreviato.) *The Tumbler Sprekelia.*

Hippeastrum *Organense ;* scapo bifloro, perianthio nutante rubro stellâ internâ sublutescente radiatâ, sepalis latioribus, calyptro in fauce tenui sæpius lacero, foliis ortu suberectis (sæpius glaucescentibus) bulbo substolonifero. *Variat multùm (ex montibus Organ dictis Braziliæ) colore, magnitudine, styli longitudine, et calyptri barbâ.* Huc potiùs referas Glaucophyllum supra 2983, certè non Aulici var. in quo sepala petalis angustiora, color saturatè fulgidus, macula interna non radiata, folia arcuata. *W. H.*

Pub by S. Curtis Glazenwood Essex June 1 1840

Lælia ánceps. Two-edged Lælia.

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Class and Order.

Gynandria Monandria.

(Nat. Ord.—Orchideæ.)

Generic Character.

Sepala explanata, lanceolata, æqualia. *Petala* majora paulo difformia. *Labellum* (posticum) 3-partitum, lamellatum, circa columnam convolutam. *Columna* aptera, carnosa, antice canaliculata. *Anthera* 8-locularis. *Pollinia* 8; caudiculis 4 elasticis.—Herbæ *epiphytæ, rhizomate pseudo-bulbifero.* Scapi *terminales pauci- v. multiflori.* Flores *speciosi, odorati. Lindl.*

Specific Character and Synonyms.

Lælia *anceps;* foliis binis aut solitariis lanceolatis, scapo ancipiti bi- trifloro squamis carinatis vestito, ovario viscoso, labelli disco lineari elevato apice trilobo, pseudo-bulbis ovatis distantibus tetraquetris. *Lindl.*
Lælia anceps. *Bot. Reg. t.* 1751.
(β.) *Barkeriana;* sepalis petalisque subæqualibus, labelli lobo medio angusto acutissimo. *Lindl. l. c. t.* 1947.

This is one of those beautiful purplish rose-coloured flowers, to which it is impossible for our artificial colours to do justice. The pseudo-bulbs were sent by Mr. Parkinson from Mexico to his Grace the late Duke of Bedford, at Woburn Abbey, where they flower in great perfection, and where there is, during the winter season, a constant succession of blossoms of this and of the allied species, also sent by Mr. Parkinson. It is, I believe, generally known that in two of the Orchideous houses at Woburn the plants are cultivated in moss, upon branches of trees placed against the sides of the building, and nothing can well exceed the vigour and beauty of the specimens.

Every

Every Botanist and Cultivator is aware of the extensive collections of Orchideæ and Cacteæ possessed by Mr. Harris of Kingsbury, and that they are under the care of one of the ablest and most scientific gardeners of this country, Mr. D. Beaton. It is to Mr. Beaton I am indebted for the following very valuable information respecting the cultivation of some of the species of this Genus, and of other Orchideæ, which he received last year from the high mountainous districts of Mistica alta in Mexico, where they were gathered by M. Galeotti, at an elevation of from seven thousand five hundred to nine thousand feet above the level of the sea :—and concerning which he writes, that "they may be cultivated in the greenhouse."

"A large importation of these plants," Mr. Beaton further observes, "arrived at Kingsbury at the close of last September, an awkward time of the season to begin to grow plants, whose natural winter was fast approaching. I laid them on shelves in the seed-room, with a thin layer of damp moss under them. By the middle of December, they imbibed moisture sufficiently to swell their bulbs to the natural size; but not wishing to risk them all in that cold place during winter, I removed the strongest sorts to the colder end of the Orchideous house, and the more tender, to a cool, dry place in the Cactus house, reserving some of each kind (to be wholly wintered in the seed-room), to the amount of about a dozen species, among which were Lælia *autumnalis*, L. *albida*, L. *furfuracea*, Cattleya *citrina*, and others, of similar habits, but which were strangers to me. The moss was kept a little moist all the winter; and the temperature of the room was from 35° to 45°. Those did far better in the seed room than those of the same species put into heat in December. Cattleya *citrina* appeared to like this treatment better than the rest. A few of the new species began to dwindle away about the middle of January under this treatment, the place being too cold for them; but if I had kept them in the same dry state in which I received them, no cold above the freezing point would have injured them all the winter.

"When they made the first effort to grow in March and April, I removed them into a brick heat; and now they have the advance of those which were in heat during the winter; and, as soon as their leaves are fully formed, I shall remove them to ripen their growth to the warmest end of the greenhouse.

"After making a season's growth in this country I would not

not of course recommend that they should be kept so cool next winter, but merely to give them from 40° to 45° of heat, and about the end of the spring to have them started in a frame if there be no stove at hand.

"You will thus see how desirable it is, for the extension of the cultivation of this family, that we should procure all the species that are to be found in the higher latitudes in Mexico and other places, to enable amateurs of limited means to cultivate a few beautiful plants of ORCHIDEÆ; for hitherto this fine tribe of plants has only been enjoyed by the wealthier classes."

Mr. BEATON still further adds, in a subsequent letter, that, "from a collection of fine ORCHIDEÆ, just received from Mr. SKINNER of Guatamala, I am enabled to give a fuller list of the hardy ORCHIDEÆ mentioned in my former letter. I believe this will be the first notice of plants of this tribe having been subjected to a cold temperature in this country; and I have ample proof that these and many others will not do so well if they are subjected to a heat above 50° or 55° in winter. Nothing can be more difficult than to bring some of the plants in my list to any state of healthy growth in our excessively-heated Orchideous houses; but, treated as greenhouse plants, and with a little forcing for six weeks at the end of the spring, or whenever they show a disposition to new growth, they seem as easy to manage as the *Stanhopeas*, or any other free-growing sorts. It is only the expense of fuel and the disagreeableness of very hot and damp houses that could prevent every lover of plants from indulging in this lovely tribe; and if they could be satisfied that there is even a portion of this lovely family that does not require such a treatment, it would be an inducement to their extensive cultivation. That such a portion does actually exist is clear from the following list of ORCHIDEÆ, which lived last winter at Kingsbury, and began growing in spring without artificial heat. The same species in the stove did not do so well, and are now unwilling to yield to additional heat.

LÆLIA *autumnalis*.
—— *furfuracea*.
—— *albida*.
CATTLEYA *citrina*.
ONCIDIUM *leuchochilum*.
BRASSAVOLA *glauca* (or *grandiflora*).
CYRTOCHILUM *sp.* (C. *Russellii*, SKINNER.)

EPIDENDRUM;

Epidendrum ; a species which looks very much like the Schomburgkia, or *Spead-Eagle* of the nurseries, but much stronger. Hartweg sent specimens of it from Chantla, in the State of Quesaltenango.

Odontoglossum *elatum.*

Hartwegia *purpurea, &c., &c.*"

Descr. *Root*, or more properly, *rhizoma*, creeping, and bearing at uncertain intervals *pseudo-bulbs*, four to five inches long, which are compressed and two-edged, and which have also prominent angles on the two flattened sides, so as to render them tetraquetrous. These are clothed with large, keeled, membranaceous scales. *Leaves* generally two from each pseudo-bulb, sometimes one, varying much in size and length, from five to eight or nine inches, oblong-lanceolate, blunt, coriaceous, glossy, smooth and even on the surface. *Scape* from the top of the bulb in the axil of the leaves, a foot and a half to two feet long, two-edged, jointed, clothed with carinated scales, and bearing two or three large, exceedingly showy *flowers*. *Perianth* delicate purplish rose-colour, spreading : *Sepals* lanceolate ; *petals* nearly ovate, all much acuminated, and each with a greenish line or nerve on the back. It may be observed that the petals and sepals in our plant have an exactly intermediate character between the α and β of Dr. Lindley. *Lip* large, three-lobed : the lateral lobes involute, so as to include the *column*, of a deep rose colour at the margin, within yellow with deep red lines ; middle lobe oblong, acute, recurved, deep purple, the disk with the base within yellow, and the middle having an elevated, thickened, yellow line, terminating in three ridges. *Column* semicylindrical. *Pollen-masses* eight.

Fig. 1. Pollen : *magnified.*

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MACROPÓDIUM NIVÁLE. SIBERIAN MACROPODIUM.

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Class and Order.

TETRADYNAMIA SILIQUOSA.

(Nat. Ord.—CRUCIFERÆ.) .

Generic Character.

Calyx laxus, basi æqualis. *Petala* indivisa. *Glandulæ hypogynæ* valvariæ 4. *Filamenta* libera, edentula. *Stigma* punctiforme. *Siliqua* supra torum longissime pedicellata, sublinearis, plana, bilocularis, polysperma, dehiscens ; valvulis planis, nervosis ; placentis dorso obtusis. *Semina* pendula, uniserialia, submarginata, plana, lævia. *Funiculi* umbilicales subulati, liberi. *Ledebour.*

Specific Character and Synonyms.

MACROPODIUM* *nivale ;* foliis radicalibus ovali-lanceolatis obscure serratis longissime petiolatis, caulinis lanceolatis sessilibus integerrimis, floribus sessilibus, petalis lineari-spathulatis. *Hook. Bot. Misc. v.* 1. *p.* 340.

MACROPODIUM nivale. *Br. Hort. Kew. ed.* 2. *v.* 4. *p.* 108. *De Cand. Prodr. v.* 1. *p.* 149. *Ledeb. Fl. Alt. v.* 3. *p.* 32. *Hook. l. c. t.* 67.

CARDAMINE nivalis. *Pall. It. II. p.* 568. *et App. p.* 740. *n.* 113. *t.* U.

ARABIS nivalis. *Spreng. Syst. Veget.* 2. *p.* 893.

This rare Cruciferous plant is more interesting to the Botanist than to the mere Florist. It was raised in the Glasgow Botanic Garden, from seeds sent by Professor LEDEBOUR,

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* So named by Mr. BROWN, from μακρος, *long*, and πους, ποδος, a *foot ;* from the long pedicel or stalk to the fruit, at once so characteristic of the Genus.

Ledebour, who gives as its locality, alpine and subalpine situations of the Altai mountains at the verge of perpetual snow, never descending below four thousand feet above the level of the sea. The Genus was founded by Mr. Brown, on the Cardamine *nivalis* of Pallas; and a second species, which is figured and described in Bot. Miscellany, (v. 1. p. 341, tab. 68,) was detected by Mr. David Douglas, about the Columbia and Wallawallah rivers, N. W. America. I am aware, indeed, that Mr. Nuttall has referred this latter to a new Genus, Pachypodium,* and he expressly says it differs from Macropodium "in the very short stipe of the siliqua, and in the incumbent cotyledons." But the young fruit on my specimens does not exhibit a very short stipes (the perfect fruit I have not seen), and the habit is so entirely that of Macropodium, that I should be very unwilling to separate it from that Genus on slender grounds.

Descr. *Root* perennial, creeping. *Plant* herbaceous, glabrous. *Stem* simple. *Root-leaves* large, oval-lanceolate, obtusely serrated, on long petioles. *Stem-leaves* sessile, lanceolate, entire. *Spike* long, of copious horizontal, or, soon deflexed, nearly sessile flowers. The very short *pedicel* is thickened where it receives the calyx. *Sepals* four, equal, erect, oblong, pale-green. *Petals* much longer than the calyx, erect, white, linear-spathulate, long, narrow. *Stamens* six, tetradynamous. *Anthers* oblong, greenish-yellow. *Pistil* terete, tapering below into a long pedicel or stipes. *Fruit*, a pendent *siliqua*, flattened and slightly falcate, *stipes* from half to three-quarters of an inch long. *Seeds* orbicular, compressed, smooth.

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* See Torrey and Gray's *Fl. of N. Am. v.* 1. *p.* 96.

Fig. 1. Flower. 2. Petal. 3. Stamens and Pistil:—*magnified.* 4. Fruit:—*nat. size.* 5. Seed:—*magnified.*

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Curtis Glazenwood Essex June 1. 184

Oncidium Huntiánum. Mr. Hunt's Oncidium.

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Class and Order.

Gynandria Monandria.

(Nat. Ord.—Orchideæ.)

Generic Character.

Perianthium explanatum. *Sepala* sæpius undulata: lateralibus nunc sublabello connatis. *Petala* conformia. *Labellum* maximum ecalcaratum, cum columna continuum, variæ lobatum, basi tuberculatum vel cristatum. *Columna* libera, semiteres, apice utrinque alata. *Anthera* semibilocularis, rostello nunc abbreviato, nunc elongato rostrato. *Pollinia* 2, postice sulcata; caudicula plana; glandula oblonga.—Herbæ *epiphytæ, nunc pseudo-bulbosæ.* Folia *coriacea.* Scapi *paniculati vaginati, rarius simplices.* Flores *speciosi, lutei, sæpius maculati, raro albi.* *Lindl.*

Specific Name and Character.

Oncidium *Huntianum;* pseudo-bulbo unico, folio solitario oblongo coriaceo crasso acutiusculo basi attenuato sessili, scapo longissimo, racemo composito elongato, pedicellis bi-trifloris, sepalis petalisque patentibus oblongo-ovatis crispatis, labello trilobo basi supra sub-5-tuberculato, lobis lateralibus crassis acutiusculis, intermedio subflabelliformi longiore medio emarginato, columna bialata.

A new Oncidium, from the inexhaustible resources of Brazil, having been sent to the Woburn collection (where it flowered in October, 1839,) by —— Hunt, Esq. of Rio de Janeiro. Its affinity probably is with O. *Carthaginense;* but the flowers are smaller, very much more beautifully marked and coloured, and the lip has a totally different structure.

Descr. The *leaf* is solitary, large, oblong, somewhat acute, very thick and coriaceous, tapering at its base, which springs at once from the root, and is only surrounded by some brown scales. *Scape* from the base of the leaf, very long, and bearing a long, narrow, compound *raceme*, with distantly-placed short branches, each with from one to three *flowers*. These flowers are white, beautifully spotted and mottled with red. *Sepals* (all free) and *petals* equal, spreading, oblongo-ovate or obovate, somewhat clawed, waved. *Lip* rather longer than the sepals, pendent, three-lobed, with about five tubercles (two larger and three smaller) at the base: the lateral lobes standing out horizontally, and rather acute, the intermediate one much larger, fan-shaped, with a notch in the middle. *Column* short, white, orange at the base, bearing above on each side of the *anthers* a large rose-coloured wing.

Fig. 1. Flower:—*magnified*.

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W. Fitch Del^t

Pub. by S. Curtis, Glazenwood, Essex, July 1. 1840

Stuart W.

ONCÍDIUM PACHYPHYLLUM. THICK-LEAVED ONCIDIUM.

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Class and Order.

GYNANDRIA MONOGYNIA.

(Nat. Ord.—ORCHIDEÆ.)

Generic Character.

Perianthium explanatum. *Sepala* sæpius undulata ; lateralibus nunc sub labello connatis. *Petala* conformia. *Labellum* maximum ecalcaratum, cum columna continuum, varie lobatum, basi tuberculatum v. cristatum. *Columna* libera, semiteres, apice utrinque alata. *Anthera* semibilocularis, rostello nunc abbreviato, nunc elongato rostrato. *Pollinia* 2, postice sulcata ; caudicula plana ; glandula oblonga.—Herbæ *epiphytæ, nunc pseudo-bulbosæ.* Folia *coriacea.* Scapi *paniculati vaginati, rarius simplices.* Flores *speciosi, lutei, sæpius maculati, raro albi.* *Lindl.*

Specific Name and Character.

ONCIDIUM *pachyphyllum ;* pseudo-bulbo nullo, folio elliptico-oblongo apice recurvo acuto crassissimo, panicula ampla, sepalis late obovato-spathulatis undulatis liberis, petalis similibus sed paulo angustioribus, labello tripartito disco basi tuberculis 4 cruciatim dispositis quinto in medio, laciniis lateralibus obovatis intermedia transversim oblonga emarginata, columna utrinque ala oblonga deflexa.

This is another extremely handsome Mexican Orchideous plant, for which the Woburn Collection is indebted to JOHN PARKINSON, Esq. It is remarkable for its large, thick, and very coriaceous leaf, its ample panicle loaded with blossoms of a greenish yellow colour, spotted with orange and red purple, and not destitute of fragrance. It flowered in January.

DESCR.

Descr. There is no evident *stem*, no *pseudo-bulb*. *Roots* consisting of numerous thick, whitish, fleshy fibres, from the top of which springs the solitary *leaf* almost a foot long, singularly thick and coriaceous, keeled on the middle at the back, the point a little reflexed and acute : the base has three or four imbricated scales, of which the outer one is withered and membranaceous, the rest green and herbaceous. From the base of this leaf, and from within one of the scales just mentioned, arises the *peduncle*, as thick as a goose-quill, bracteated, two feet and more long, terminated by a large, many-flowered panicle. *Pedicel*, including the cylindrical *ovary*, an inch and a half long. *Flowers* an inch across, the whole perianth waved. *Sepals* free to the base, broadly obovato-spathulate, greenish-yellow spotted with red-purple, concave : the *petals* similar to them in form and colour, but rather narrower. *Lip* yellow, deeply divided into three lobes, the lateral lobes obovate, the middle one transverse, broadly oblong, tapering at the base, the apex notched : the disk of the labellum at the base is considerably elevated, spotted with orange, and bears four tubercles placed in a cross-shaped manner, and between them a larger and more prominent one. *Column* short, having on each side, near the top, a curved wing or horn-like process pointing downwards. *Anther-case* very large.

Fig. 1. Column and Lip :—*magnified.*

Pub. by W. Curtis Glazenwood Essex. July 1. 1841

Sálvia pátens. Spreading Sage.

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Class and Order.

Diandria Monogynia.

(Nat. Ord.—Labiatæ.)

Generic Character.

Calyx subcampanulatus, bilabiatus, labio superiore 3-dentato, inferiore bifido. *Corolla* ringens. *Filamenta* duo fertilia bifida, lobo altero adscendenti anthera dimidiata, altero sterili. *Br.*

Specific Character and Synonyms.

Salvia *patens ;* radice tuberosa, foliis cordatis aut hastatis ovato-oblongis supra pilosis subtus pubescentibus floralibus lanceolato-linearibus, verticillastris remotis subbifloris, floribus maximis, galea falcata, labelli trilobi lobis lateralibus minutis acutis intermedio transverso concavo subangulato emarginato.

Salvia patens. *Cav. Ic. v.* 5. *p.* 33. *t.* 454. *Spreng. Syst. Veget. v.* 1. *p.* 63. *Benth. Lab. p.* 395, *in Hort. Trans. N. S. v.* 2. *p.* 222. *t.* 10. *Lindl. Bot. Reg.* 1839, *t.* 23.

This splendid species of Sage is said to have been first introduced to our gardens from Mexico by Mr. Page of Southampton, and is now in very general cultivation. Like the bright scarlet-blossomed Mexican Salvias it will only succeed in the open air during the summer months; and then in a warm sheltered situation in a South aspect it bears its large, handsome flowers of the richest dark ultramarine blue inclining to purple. Mr. Curtis, (at whose Nursery at Glazenwood this drawing was made by Miss Dally,) observes that there are many varieties in his Collection, varying in the foliage, which is sometimes wholly green, sometimes deeply stained with purple at the back like Cineraria *cruenta,*

cruenta, and in the colour of the blossoms, which are of a more or less intense blue. The one here figured he considers the handsomest of them all, and certainly few plants can be more lovely.

Descr. *Stem* from two to three feet high, square, pubescenti-hirsute. *Leaves* on long, grooved footstalks, large, hastate, serrated, downy and ciliated, reticulated, smaller upwards. *Spikes* of *flowers* elongated. *Bracteas* linear-lanceolate. *Pedicels* solitary, opposite, one-flowered. *Flower* very large, perhaps the largest of the Genus. *Calyx* green, sometimes tinged with purple, two-lipped, upper lip bifid, lower trifid. *Corolla* as described in the specific character:—there are three white, transverse bands at the base of the lower lip.

W.H. 1. *W.H. 2.*

W Fitch del.

Pub by S Curtis Glazenwood Essex July 1 1840.

MARICA HUMILIS; *var.* 2, lutea. HUMBLE MARICA; yellow *var.*

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Class and Order.

TRIANDRIA MONOGYNIA.

(Nat. Ord.—IRIDACEÆ.)

Generic Character.

Perianthium dispar, sepalorum laminâ patente, petalorum minore incurvè revolutâ ungue cymbiformi inferne solido angustiore; *stylus* inferne gracilis superne incrassatus trigonus trilobus lobis acutè rigidè tricristatis cristâ anticâ stigmatis lobos interpositâ, posticis altioribus, stigmatibus mollibus transversis brevibus; *filamenta* libera disco inserta; *antheræ* oblongo-ovales loculis lateralibus connectivo filamentum continuante dorso styli lobis agglutinato; *folia* plana margine opposito alternantia; *caulis* alato-planus prolifer; *capsula* crassè coriacea reflexè dehiscens; *semina* testacea sub-oblongo-angulata et (quoad genera cognata) magna. *Plantæ Americanæ tropicæ rhizomate brevi. W. H.*

Specific Name and Character.

MARICA *humilis;* spathâ communi foliaceâ acutâ rectâ pedunculos summos subæquante, pedunculo inferiore bracteato, caule summo æquifurcato, flore modico purpureo-lutescente, cristis tenuibus.

V. 1. princeps. *Lod. Bot. Cab.* 1081. *Folia* dodrantalia-sesquipedalia sesquiunciam lata acuta subarcuata; *caulis* infra articulum 14-unc. alâ inferne gradatim angustiore, superne vix unciam latâ, 7-unc. articulum superans; *bracteæ caulinæ* subfalcatæ $1\frac{1}{4}$—$1\frac{1}{2}$-unciales, ramuli ultraunciales, *spathæ* subdecemfloræ valvis 2 cymbiformibus pedunculos unciales subæquantibus bracteis internis conformibus tenuioribus; *perianthium* sepalorum ungue lato subpatulo pubescente lutescente transversè fusco-purpureo 4-striato, laminâ recurvo-

deflexâ

deflexâ sordidè luteâ medio intus lactescente, petalorum ungue lutescente obliquè biseriatim striato, laminâ marginibus reflexis, gibbo medio et unguis marginibus pubescentibus, apice saturatè purpureo maculâ infra albâ cæruleo-striatâ ad basim luteâ; *filamenta* disci papillis tribus inserta linearia angusta plana incurvo-conniventia; *pollen* pallidum; *stylus* inferne filiformis, cristis tenuibus, anticâ apice subreflexo, posticis erectis; *stigmata* lobis discretis obtusis incurvis. *Descriptio ex plantâ Loddigesianâ Spofforthiæ floridâ.*

V. 2. *lutea;* (nisi per se M. *lutea?* quod ex tabulâ pictâ non affirmare ansim) foliis angustioribus erectioribus, obsoletorum basi bracteæformiter caulescente, bracteis longioribus rectioribus, perianthio sepalorum laminâ saturatè luteâ (ungue 5-striato?) petalorum apice albo viridi transversè striato? *W. H.*

This plant, (a native of Brazil?) having flowered in the Glasgow Botanic Garden during the absence of Sir W. J. Hooker, its features can only be gathered from the sketch, which is too rude to enable reliance to be placed on some of the nice points in the structure and colour of the flower. It evidently approaches near to M. *humilis*, being distinguished, if the drawing is quite correct, by narrower and straighter leaves, with a short bracteate stem, by longer and straighter bracts enclosing the ramules, and brighter yellow sepals, with five instead of four bars of a redder colour, and the ends of the petals white with green bars instead of plain purple. If these features should be confirmed by further observation, and should prove invariable, the plant may be distinguishable as M. *lutea*.

The name Marica was most improperly substituted by Schreber for Cipura of Aublet, which belongs to *paludosa*, and must be restored. It was subsequently applied by Mr. Ker in 1803 to M. *Northiana*, which is, therefore, the type, and he proposed to add to the Genus the plant before called Iris *Martinicensis* (Trimezia *Martinicensis* of Salisbury), with the Ixia *Americana* of Aublet, under the name of M. *plicata*, and perhaps the Sisyrinchium *palmifolium* of Linnæus, the two last of which have no close affinity to the Genus Marica. The character was so loosely framed that other Genera were afterwards blended with it. Marica (confined, as it must be, to *Northiana* and the plants which truly conform with it) is distinguished by flat leaves placed

placed edgeways, a flat winged proliferous stalk ending in a leaflike common spathe or bract, sepals and petals very dissimilar, the former larger and deflexly patent, the latter boat-shaped, with an incurved central knob, and a revolute end, capsule hard, coriaceous, and reflexly dehiscent, seeds angularly oblong or nearly square, and much larger than in the plants Mr. KER proposed to unite with it; the style slender below, triangularly enlarged upwards into three lobes, each bearing three, sharp, rigid crests, of which two are behind and one springs from between the lobes of the true stigma, which is soft, short, and transverse like that of IRIS. *W. H.*

Fig. (W. H.) 1. represents one Style-lobe of M. *humilis princeps.* (W. H.) 2. Two Style-lobes and Stamens of ditto.

MARICÆ *Species Notæ.*

1. *Northiana ;* spathâ communi foliaceâ circ. $3\frac{1}{2}$-unc. subfalcatâ flores subæquante, caule supra articulum brevi crasso mox deflexo, perianthio unguibus luteis rubro maculosis, sepalorum laminâ luteolactescente petalorum apice subcæruleo. *Supra* 654.
2. *cærulea ;* spathâ communi foliaceâ subdodrantali flores subæquante, ramulis subfasciculatis elongatis, perianthio unguibus luteis rubro maculosis, laminis cæruleo-purpurascentibus, cristis brevioribus latioribus. *Bot. Reg.* 713.
3. *humilis. Lodd. Bot. Cab.* 1081.
4. *humilis,* v. *lutea,* vel M. *lutea ?*
5. *gracilis ;* spathâ foliaceâ ultrapedali flores longè superante, ramulis et spathæ valvis gracilibus, perianthio unguibus luteis purpurâ maculosis sepalorum laminâ albâ petalorum apice purpureo, cristis tenuibus. *Supra* 3713.
6. *Sabiniana ;* spathâ communi foliaceâ ultrapedali 2-unc. latâ flores superante, perianthii unguibus luteis rubro transversè biseriatim striatis, laminis (petalorum saturatiùs) purpurascentibus. *Hort. Soc. Tr. v. 6. p.* 1.

Omnes, ni fallor, ex Americâ tropicâ. *W. H.*

Pub. by S. Curtis Glazenwood Essex July 1 1840.

Lælia furfurácea. Scurfy-stalked Lælia.

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Class and Order.

Gynandria Monandria.

(Nat. Ord.—Orchideæ.)

Generic Character.

Sepala explanata, lanceolata, æqualia. *Petala* majora paulo difformia. *Labellum* (posticum) 3-partitum, lamellatum, circa columnam convolutum. *Columna* aptera, carnosa, antice canaliculata. *Anthera* 8-locularis. *Pollinia* 8; caudiculis 4 elasticis.—Herbæ *epiphytæ, rhizomate pseudo-bulbifero.* Scapi *terminales pauci v. multiflori.* Flores *speciosi, odorati. Lindl.*

Specific Character and Synonym.

Lælia *furfuracea ;* pseudobulbis ovatis striatis submonophyllis, foliis anguste oblongis erectis acutis scapo unifloro (?) tereti, multo brevioribus, bracteis oblongis membranaceis acutis, sepalis lanceolatis acuminatis patentissimis, petalis subrhombeis lanceolatis undulatis sublobatis, labelli trilobi bilamellati lobis lateralibus erectis rotundatis truncatis intermedio oblongo revoluto, ovario glandulis nigris furfuraceo. *Lindl.*

Lælia furfuracea. *Lindl. Bot. Reg.* 1839, *t.* 26.

From the Woburn Gardens, where it was received from Mexico, through Mr. Parkinson. "It is," as Professor Lindley observes, "very like L. *autumnalis* (Tab. 27, *vol. for* 1839); but its pseudo-bulbs are merely ovate and slightly (in our *old* pseudo-bulbs very deeply) furrowed; the leaves are solitary or in pairs, not in twos or threes: they

they are erect and straight, not spreading and curved; the flowers have little or no smell; the petals are so much undulated as to appear lobed, and they are distinctly rhomboidal, and, finally, the ovary is closely covered with black, mealy glands. It would seem, moreover, that the scape does not bear more than one flower, instead of several."

Having the three species of LÆLIA (L. *anceps*, L. *autumnalis*, and L. *furfuracea*,) from Mr. FORBES of the gardens at Woburn Abbey, I can bear testimony to the accuracy of Dr. LINDLEY's specific distinctions; and may state, with regard to the present species, in addition to what he has above remarked, that though its leaves are the smallest, they are the thickest and most coriaceous of any of the three, and that in our specimens at least the middle lobe of the labellum is not obtuse with a mucro, as in L. *autumnalis*, but decidedly and rather suddenly acuminated. The pollen-masses are exactly like those of L. *autumnalis*; but rather different from those of L. *anceps*.

Fig. 1. Column. 2. 3. Pollen-masses :—*magnified.*

Rhododéndron Caucásicum; hybridum. Hybrid *var.* of Rhododendron Caucasicum.

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Class and Order.

Decandria Monogynia.

Generic Character.

Calyx 5-partitus. *Corolla* infundibuliformis 5-lobus. *Stamina* 5—10, declinata: *antheris* apice biporosis. *Capsula* 5-locularis, 5-valvis, ab apice dehiscens valvarum marginibus inflexis dissepimenta formantibus: *Receptaculum* centrale. *Semina* membrana involuta.

Specific Name and Synonyms.

Rhododendron *Caucasicum*; hybridum.
Rhododendron Caucasicum. *Pall. Ross.* 1. *p.* 4. *t.* 31. *(See Bot. Mag. t.* 3422.*)*
Rhododendron (Azalea) *Pontica*; *var.* albiflora. *(See Bot. Mag. t.* 2383.*)*

For this hybrid Rhododendron, the Botanic Garden of Glasgow is indebted to the kindness of Mr. James Veitch, of Exeter, who informs us it was the offspring of the R. *Caucasicum*, and R. (Azalea) *Ponticum, albiflorum*: and though so far interesting, yet it cannot be considered an improvement upon either parent. Our plant from which the figure was taken blossomed in May, 1838.

2.
3.

Zygopétalum Africánum. African Zygopetalum.

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Class and Order.

Gynandria Monandria.

(Nat. Ord.—Orchideæ.)

Generic Character.

Perianthium explanatum, sepalis petalisque ascendentibus, subæqualibus, cum ungue producto columnæ connatis. *Labellum* muticum, indivisum, patens, ungue ascendente; crista magna transversa carnosa. *Columna* brevis, arcuata, semiteres. *Anthera* subbilocularis. *Pollinia* 2, bipartibilia, in glandulam transversam subsessilia.—Herbæ *terrestres*, *subacaules*, *foliis plicatis patentibus*. Flores *speciosi*, *labello cæruleo*. *Lindl.*

Specific Name and Character.

Zygopetalum *Africanum*; foliis lanceolatis striatis, scapo longissimo, racemo elongato laxo simplici, sepalis petalisque lineari-lanceolatis, labello stipitato basi lamellis duabus carnosis oblongis acutis, lobo medio lato ovato acuminato undulato apice reflexo, columna cylindracea superne utrinque alata.

I think there can be no question on the propriety of referring this plant to Zygopetalum, the first of the Genus that has been discovered inhabiting the old world. It was sent by Dr. Whitfield from Sierra Leone to the Woburn Collection, whence Mr. Forbes has obligingly transmitted the present flowering specimen in December, 1839.

Descr. *Pseudo-bulbs* five to six inches long, oblong, compressed, obscurely striated or furrowed; the younger ones partially sheathed with large distichous, imbricated scales,

scales, and terminated by a single *leaf*, about a foot long, lanceolate, striated. *Scape* from the base of a pseudo-bulb, full three feet long, as thick as a goose-quill near the base, terete, jointed, with sheathing scales, which gradually pass into subulate *bracteas* at the base of the pedicels. *Flowers* in a long, simple *raceme*, destitute of scent. *Sepals* united at their base, linear-lanceolate, the uppermost one the broadest; *petals* similar to the lateral sepals in shape and size, and both sepals and petals greenish-yellow, blotched with brown. *Lip* moderately large, contracted at the base and tapering into a short stipes: lateral lobes obsolete, unless the two large, upright, oblong, fleshy, lamellæ constituting a conspicuous crest near the base of the labellum can be so called, and which are yellow tinged with rose-colour and white:—middle lobe large, broadly ovate, acuminate, waved, especially at the margin, the apex reflexed: the colour is white, tinged with flesh colour and yellow, and it is faintly striated. *Column* elongated, cylindrical, dingy yellow spotted with reddish colour, a little thickened upwards and there furnished with two conspicuous orange-coloured projecting wings, one on each side. *Anther-case* helmet-shaped. *Pollen-masses* two, obovate, waxy, obscurely two-lobed behind: these are fixed upon a slender caudicle, at the base of which is a linear, brown gland.

Fig. 1. Lip. 2. Column. 3. Pollen-masses.

Céreus látifrons. Broad-stemmed Cereus.

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Class and Order.

Icosandria Monogynia.

(Nat. Ord.—Cacteæ.)

Generic Character.

Sepala numerosissima imbricata, basi ovario adnata, in tubum elongatum concreta, exteriora breviora calycinalia, media longiora colorata, intima petaliformia. *Stamina* numerosissima cum tubo concreta. *Stylus* filiformis, apice multifidus. *Bacca* areolata, sepalorum reliquiis squamata aut tuberculosa. *Cotyledones* acuminatæ.—Frutices *carnosi, subglobosi vel elongati, stricti, articulati vel repentes, axi ligneo interne medullifero donati, angulis verticalibus, spinarum fasciculos gerentibus vel inermibus, irregulariter sulcati.* Anguli *seu alæ nunc plurimæ, nunc paucissimæ, rarius duæ tantum et tunc rami compresso-alati inermes.* Flores *ampli e spinarum fasciculis lateralibus trunci aut ramorum vetustiorum, aut crenis angulorum orti.* Fructus *oviformes, plerumque anno sequente maturescentes, edules. Pfeiffer.*

Specific Character and Synonyms.

Cereus *latifrons;* ramis maximis planis foliaceis viridibus apice obtusis, marginibus repando-dentatis, dentibus truncatis. *Pfeiff.*

Cereus latifrons. " *Zucc. in Act. Acad. Bavar.* 1837. 2. *p.* 735. *Pfeiffer, Enum. Cact. p.* 125. *Pfeiff. et Otto, Cactées, tab.* 13. *f.* 2.

Cereus oxypetalus. *De Cand. Révue, tab.* 14.

Epiphyllum latifrons. *Zucc. in Cat. Hort. Monac.* 1836.

From the collection of the Messrs. Mackie of Norwich, by whom I am favoured with the drawing, from which the annexed

annexed engraving is made. This species was, I believe, one of Mr. Hitchin's collection, who received it from the continent under the name of Epiphyllum *oxypetalum*, (Cereus *oxypetalus, D C.*) which Dr. Pfeiffer, it appears, justly considers the same as the C. *latifrons* of Zuccarini, a much more appropriate name it must be confessed. It is certainly very nearly allied to our C. *phyllanthus* (Bot. Mag. t. 2692, the C. *phyllanthus*, var. *flore majore* of De Cand., C. *Hookeri*, Haw., and of Pfeiffer and Otto, *Cactées*, tab. 5.) These latter authors say, that it differs from C. *Hookeri* " par la crénelure de ces rameaux et par la forme de sa fleur :" but these distinctions are not very evident, even in their own figures. It flowers in August.

Descr. A tall-growing plant, incapable of supporting itself, jointed and proliferously branched; the *branches* and *joints* elongated, very broad and compressed, with an elevated nerve or costa in the middle, and which sends out a branch where a flower arises, the margin crenulated, sometimes tinged with purple. From a crenature of the margin the *flower* arises, which is peculiarly large, solitary, and handsome. *Tube* very long and slender, tinged with purple, and beset with purple or reddish *scales*, which gradually pass into the *calycine segments*, and these almost imperceptibly into *petals* : the latter are pure white, lanceolate, acuminated. *Stamens* long, numerous, yellowish-white. *Style* red, longer than the stamens. *Stigma* of many yellow rays.

S. Fitch Del.

Pub. by S. Curtis Glazenwood. Essex. Aug.t 1 1840

Málva purpuráta. Purple Mallow.

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Class and Order.

Monadelphia Polyandria.

(Nat. Ord.—Malvaceæ.)

Generic Character.

Calyx cinctus involucro 3-phyllo rarius 5—6-phyllo, bracteolis oblongis setaceisve. *Carpella* capsularia plurima in orbem disposita. *D C.*

Specific Character and Synonym.

Malva *purpurata;* herbacea pubescens, ascendens, foliis inferioribus 5—7-partitis superioribus 3-partitis, laciniis pinnatifidis furcatisque segmentis oblongis, floribus axillaribus solitariis, pedunculis petiolo longioribus, involucro di- triphyllo foliolis linearibus deciduis.

Malva purpurata. *Lindl. Bot. Reg. t.* 1362.

A handsome perennial, drawn from the greenhouse of the Glasgow Botanic Garden. It is a native of the Cumbre, a pass in the Andes of Chili, and was introduced to the garden of the Horticultural Society by Mr. Macrae. In England it is treated as a hardy plant; but requires a dry season to bring it to perfection. I have seen no native specimens: but it is unquestionably very nearly related to the Malva *tenuifolia* (Arn. et Hook. in Bot. Miscell. v. 3. p. 150), and I cannot but feel doubtful as to the propriety of referring these plants to Malva rather than to Sida. The two or three bracteas, for they are not constant in number, do not form a whorl so as to constitute a real involucre; but spring from different heights, and so quickly do they wither and fall away that even in the state of the bud, the calyx is often destitute of them. The flowering season of our plant is June and July.

Descr.

Descr. *Stems* ascending, very downy and slightly canescent. *Leaves* alternate, petiolate, cordate in their circumscription, downy, the lower ones 5—7-parted, the lobes pinnatifid, segments oblong, the apices acute, bi- or trifid: the upper *leaves* are mostly tripartite, with the segments narrower and less divided. *Petiole* one and a half or two inches long, with two broadly subulate, deciduous *stipules* at the base. *Peduncles* axillary, solitary, single-flowered, erect, longer than the petiole. *Calyx* deeply five-cleft, the segments acuminated, spreading, downy, with two or three deciduous linear or almost filiform *bracteas*. *Corolla* moderately large. *Petals* purple-lilac, obcordate.

Fig. 1. Calyx: *magnified.*

GESNÉRIA MÓLLIS. SOFT-LEAVED GESNERIA.

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Class and Order.

DIDYNAMIA ANGIOSPERMIA.

(Nat. Ord.—GESNERIACEÆ.)

Generic Character.

Calyx ovarii basi adnatus, limbo subinæqualiter 5-partito libero. *Corolla* tubulosa ima basi 5-gibberosa aut æqualiter subtumida, limbo 5-fido, lobis nunc in labio duo dispositis, nunc subæqualibus. *Stamina* 4, imæ corollæ adnata, didynama cum quinti rudimento. *Antheræ* juniores, cohærentes. *Stylus* filiformis, stigmate capitato aut bilobo. *Glandulæ perigynæ* 2—5 circa ovarii basin. *Capsula* coriacea 1-locularis bivalvis, valvis convexis, placentis 2 parietalibus polyspermis. *Semina* scobiformia.—Herbæ *perennes, radice tuberosa; rarius* frutices. Caulis *simplex aut opposite ramosus.* Folia *opposita aut verticillata dentata.* Pedunculi *simplices uniflori aut ramosi multiflori, axillares aut in thyrsum racemumve terminalem dispositi. D C.*

Specific Character and Synonyms.

GESNERIA *mollis;* foliis oppositis suboblique ovatis acuminatis serratis supra dense velutino-pubescentibus subtus ramisque teretibus dense longeque sericeo-pilosis, pedicellis elongatis umbellatis (3—5), pedunculo brevissimo, calycis lobis lineari-subulatis, corollæ densæ hirsutæ limbo subæquali 5-lobo (maculato) lobis acutis reflexis, stylo exserto, stigmate bifido.

GESNERIA mollis. *Humb. et Kunth, Nov. Gen. Am. Merid. v. 2. p. 317. t. 191. Spreng. Syst. Veget. v. 2. p. 838. De Cand. Prodr. v. 7. p. 531.*

I am indebted to Mr. BEATON, the very accomplished gardener at Kingsbury, (already mentioned under tab. 3804 of

of this volume,) for the handsome Gesneria here represented. "Seeds of this plant," he says, "were transmitted by Mr. Mackenzie, the collector at the Caraccas for Mr. Harris and Mr. Lowe of the Clapton Nursery, and sent to both these zealous cultivators in February, 1819; so that the plant shows its flowers in fourteen months from the planting of the seeds. Mackenzie found it at the foot of St. Pedro, thirty miles from the city of Caraccas. This species does not produce tuberous roots like most of the Genus, yet the stems are herbaceous, and die down after producing seeds; at least, I think so from a cluster of scaly, creeping stems now forming of the colour of the plant, and which are analogous to the roots of Trevirana *coccinea*. The plant having begun thus early to provide itself with these creeping stems for producing a succession of flowering-stems and for extending itself on all sides, may be taken in evidence that this species does not require much rest, like the large tuberous-rooted *Gesneriæ*. The stems are about eighteen inches high; but when the plant is older and stronger, we may expect them greatly to exceed that size. The seeds, like all of the Genus, are very small, and should be sown in sand previously watered, and then pressed down gently in the wet sand, but not covered. The young plants will rise in a few days and ought to be kept in a shady place till they are fit to be transplanted."—I think there can be no doubt of its being the G. *mollis* of Humboldt and Kunth, though there are some slight discrepancies, but not more than may be accounted for from the circumstance of Humboldt's figure being made from dried specimens.

Descr. The shrubby *stems* and whole underside of the *leaves* are clothed with long, dense, silky hairs. From the axils of the leaves the very short *peduncles* appear, solitary, scarcely more than a line long, having at the top some small bracteal scales. *Umbel* of from three to five *flowers*, on long hairy pedicels. *Calyx* with long, subulate divisions; the *tube* incorporated with the lower half of the *ovary*. *Corolla* funnel-shaped, rather densely hairy, red; —the throat moderately open; the *limb* equal, of five short, reflexed, acute lobes, orange spotted with red. *Stamens* included. *Style* exserted. *Ovary* very hairy, with five, equal-sized, yellow glands at the base. *Stigma* bifid.

Fig. 1. Pistil: *magnified.*

Stylídium fasciculátum. Fascicled-leaved Stylidium.

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Class and Order.

Gynandria Diandria.

(Nat. Ord.—Stylidieæ.)

Generic Character.

Calycis limbus bilabiatus. *Corolla* irregularis quinquefida, lacinia quinta (labello) dissimili minore sæpius deflexa, reliquis patentibus interdum geminatim cohærentibus. *Columna* genitalium reclinata duplici flexura. *Antheræ* bilobæ lobis divaricatissimis. *Stigma* obtusum indivisum. *Capsula* bilocularis septo superne interdum incompleto.—Herbæ *aut* suffruticuli. Folia *aut radicalia rosulata aut secus caulem sparsa, interdum basi attenuata.* Pili *sæpius apice glandulosi. De Cand.*

Specific Character and Synonyms.

Stylidium *fasciculatum ;* caulibus plurimis adscendentibus glaberrimis foliosis, foliis linearibus acutis summis fasciculato-subverticillatis, floribus in spicam subracemosam terminalem bracteatam ad rachin glabram digestis, capsula compressa lanceolata loculo superiore vacuo angustissimo.

Stylidium fasciculatum. *Brown, Prod. Fl. Nov. Holl. p.* 572. *De Cand. Prod. 7. p.* 337 ? *Spreng. Syst. Veg.* 3. *p.* 749 ? *Lindl. in Bot. Reg. t.* 1459, *certe.*

Professor Lindley has pointed out the only difference between the cultivated plant and Mr. Brown's specific character; but this difference, which lies in the ovarium and fruit having only one perfect cell, is certainly neither accidental nor the effect of cultivation, as our figure of the ripe fruit, taken from a wild plant, will show. Native specimens were sent by Mr. Baxter from King George's Sound, and they

they accord in every respect with that cultivated. M. De Candolle appears to have seen only the latter, and yet he follows Mr. Brown in saying, that both cells of the capsule bear seed, while at the same time he refers to the Botanical Register, where the contrary is asserted.

Descr. *Stems* several from the same *root,* from one to two feet high, glabrous, leafy, particularly on the upper portion, slightly branched. *Leaves* linear, acute, very slightly rough : the upper ones as well as the bracteas, calyx, and outside of the corolla furnished with a short, glandular pubescence ; lower ones scattered, upper ones fascicled, and forming a kind of verticel of several approximated rows. *Spike* from two and a half to six inches long, erect, shortly stalked, resembling a raceme on account of the attenuated base of the elongated ovaries : *rachis* glabrous. *Bracteas* subulate, incurved and slightly falcate. *Calyx* five-cleft, two-lipped, glandular, segments subulate. *Corolla* irregular, five-cleft, one of the divisions resembling a lip, smaller than and of a different shape from the others, and deflexed: the other divisions oval, quite entire, white and spotted with red at the base. *Stamens* two : *filaments* united into a column with the style. *Anthers* two-lobed, incumbent on the stigma, the lobes much divaricated. *Style* one, united with the column of stamens. *Stigma* blunt, undivided. *Ovary* inferior, or cohering with the tube of the calyx, narrow-linear, twice as long as the bractea, attenuated at each extremity, compressed, with a ridge along the upper side, two-celled, the lower or anterior cell bearing many *ovules;* the upper minute and empty, contained within the ridge. *Capsule* compressed, lanceolate, attenuated at the apex, two-celled, the upper cell a mere indurated, empty, very narrow tube, which is indehiscent : lower cell ventricose, bursting along the placenta which is attached to the upper margin. *Seeds* small, oval, slightly roughish, chestnut-coloured. *Albumen* between oily and fleshy, inclosing the minute *embryo.*

Professor Lindley mentions the plant to be annual, and only three or four inches high : in the greenhouse of the Botanical Garden of Glasgow its duration is more than annual, and it attains to about two feet. It is a very charming plant, no less deserving of cultivation for its beauty, than for the singular property of the column of stamens being endowed with a very active irritability, so that if touched with a pin on the outside when curved, it bounds over to the opposite side of the flower and becomes inverted : this property is observable, in a greater or less degree, in the whole Genus. *G. A. W. A.*

Fig. 1. Flower, seen above, and f. 2, ditto seen from below, both seated on the apex of the Ovary. 3. Ovary, cut transversely about the middle : *all magnified.* 4. Ripe fruit, *natural size.* 5. Ditto, *magnified.* 6. Seed, *magnified.*

Pub by S. Curtis Glazenwood Essex. July 1.1840

LÆLIA AUTUMNÁLIS. AUTUMNAL LÆLIA.

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Class and Order.

GYNANDRIA MONANDRIA.

(Nat. Ord.—ORCHIDEÆ.)

Generic Character.

Sepala explanata, lanceolata, æqualia. *Petala* majora, paulo difformia, carnosa, explanata. *Labellum* posticum, 3-partitum, lamellatum, circa columnam convolutum. *Columna* aptera, carnosa, antice canaliculata. *Anthera*— ? *Pollinia* 8, caudiculis quatuor elasticis.—Herbæ *epiphytæ, rhizomate pseudo-bulbifero.* Folia *carnosa.* Scapi *terminales, pauci vel multiflori.* Flores *speciosi, odorati. Lindl.*

Specific Character and Synonyms.

LÆLIA *autumnalis;* pseudo-bulbis ovatis teretibus costatis apice attenuatis 2—3-phyllis, foliis oblongo-linearibus patentissimis scapo multo brevioribus, scapo tereti apice subsexfloro, bracteis oblongis membranaceis acutis, sepalis lanceolatis acuminatis patentissimis, petalis oblongo-lanceolatis undulatis, labelli trilobi bilamellati lobis lateralibus erectis rotundatis truncatis intermedio oblongo-lanceolato apice reflexo, ovario glabro. *Lindl.*

LÆLIA autumnalis. *Lindl. Gen. et Sp. Orchid. p.* 115. *Bateman, Orch. Mexic. et Guatemal. t.* 9. *Lindl. Bot. Reg.* 1839. *t.* 27.

BLETIA autumnalis. "*La Llave et Lexarx. Nov. Veg. Descr.* 2. 19."

Similar as the general appearance of this beautiful plant is to LÆLIA *anceps* (Botanical Register, tab. 1751): it is nevertheless abundantly distinct, in its pseudo-bulbs, scapes, and flowers, as well as in its agreeable perfume. Our specimen,

cimen, here figured, is from the Woburn Collection, to which the plants were sent from Mr. Parkinson in July, 1838.

Descr. *Pseudo-bulbs* oblong-lanceolate, obscurely furrowed, with two opposite, blunt edges, otherwise nearly terete, sheathed with large, imbricated, closely applied scales, and crowned with two *leaves*, which do not exceed five inches in length, oblong, obtuse, coriaceous, smooth. *Scape* from between the two leaves, a foot and a half to two feet high, terete, jointed, with sheathing scales at the joints, terminated with from two to four *flowers*, which are large, showy, and fragrant. *Perianth* very similar to that of L. *anceps*; but destitute of the green rib. *Lip* with two large, erect, whitish side-lobes, and an obovate, obtuse, apiculated, deep purple intermediate one: in the disk are two very distinct, upright, membranous, long lamellæ or plates. *Column* semicylindrical. *Pollen-masses*, with the four superior lobes obcordate, the four lower ones smaller, semiobovate.

Fig. 1. Column. 2. Pollen-masses. 3. Side view of ditto :—*magnified.*

Batemánnia Colléyi. Mr. Colley's Batemannia.

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Class and Order.

Gynandria Monandria.

(Nat. Ord.—Orchideæ.)

Generic Character.

Flores ringentes. *Sepala* patentia, lateralia unguiculata basi æqualia. *Petala* sepalis latiora, basi obliqua, pedi producto columnæ adnata. *Labellum* cum columna articulatum, trilobum, cucullatum. *Columna* semiteres, basi elongata, clinandrio marginato. *Anthera* parva, biloculari, membranacea. *Pollinia* 2, postice biloba, glandula triangulari, caudicula nulla. *Lindl.*

Specific Name and Synonym.

Batemannia * *Colleyi.*
Batemannia Colleyi. *Lindl. Bot. Reg. t.* 1714.

The plant from which the accompanying drawing was taken, was sent by Dr. Fraser from Demerara to the Glasgow Botanic Garden, having been first detected by Mr. Colley, Mr. Bateman's collector, in the same country. With us, its flowering season is February: the blossoms yield a disagreeable odour.

Descr. *Pseudo-bulbs* oblong, compressed, with four deep furrows and as many projecting and rather acute angles, of a dark purplish-green colour and scaly at the base.

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* In compliment to James Bateman, Esq., of Knypersley, Cheshire, a most distinguished cultivator of Orchideous Epiphytes, and author of the most splendid work that has ever appeared on that subject.

base. *Leaf* on the old bulbs solitary from the apex of the bulb, broadly-lanceolate, acute, attenuated at the base, between membranaceous and coriaceous, about seven-nerved. On the very young pseudo-bulbs, before these are fully formed, the leaves are two and three. *Scape* from the base of a young pseudo-bulb, pendent, flowering almost from the base. *Flowers* large, handsome, rather distant. each with a broad, concave, heart-shaped *bractea* at the base. *Sepals* oblong, concave, combined at the base, and decurrent with the column, erect at the back of the column. *Petals* linear-lanceolate, arising from the base of the united sepals, deflected, the lower (or interior) margin inflected, scarcely unguiculate. *Colour* of the *petals* and *sepals* greenish, tinged with purplish-red. *Lip* erect, almost appressed to the column, whitish, oblong, grooved, three-lobed, middle lobe notched; all of them serrated: within the lip dotted with red, striated in the middle; near the base, and at the union of the lobes, is a bifid serrated scale. *Column* semiterete, white, freckled with red. Round the anther is a broad, winged, crenated border (the *clinandrium*). *Anther-case* somewhat rhomboid, membranaceous, with two small *cells* beneath. *Pollen-masses* 2, oblong-ovate, each two-lobed at the back, united by an oblong-cuneated gland, destitute of caudicula. The *germen* is attached to the back of the sepals, considerably above their united base.

Fig. 1. Inner view of the Labellum. 2. Upper, and 3, Underside of an Anther-case. 4. Pollen-masses. 5. Column, with the lower combined portion of the three Sepals decurrent with the back:—*magnified.*

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M. Norbury Del.

Pub.d by S. Curtis Glazenwood Essex Sept.r 1 1840

Monachánthus longifólius. Long-leaved Monk-flower.

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Class and Order.

Gynandria Monandria.

(Nat. Ord.—Orchideæ.)

Generic Character.

Perianthium explanatum. *Sepala* et *petala* æqualia deorsum versa. *Labellum* posticum, carnosum, indivisum, ventricosum, sepalis multo majus. *Columna* brevis, crassa, mutica. *Anthera* et *pollinia* Cataseti.—*Epiphytæ* Cataseti *habitu. Lindl.*

Specific Character and Synonym.

Monachanthus *longifolius;* foliis longissimis gramineis, racemo cylindraceo pendulo multifloro, sepalis ovatis subrotundis petalorum conformium dorso applicitis, labello urceolari a tergo incurvo limbo truncato apiculato intus cereaceo glabro margine fimbriato. *Lindl.*
Catasetum longifolium. *Lindl. in Misc. of Bot. Reg.*, 1839, *n.* 154. *Lindl. Sert. Orchid. t.* 31.

It is not from any opinion we entertain that the Genus Monachanthus is really distinct from Catasetum, that we adopt the former name, in opposition to that given by Dr. Lindley; but for the sake of consistency in this work. There is a natural group of Catasetum, the species of which are destitute of the long setæ on the column, and to which the name of Monachanthus has been applied.

The very fine species here represented was sent to us by Mr. Brocklehurst, of the Fence, Macclesfield, in September, 1839, a month before it flowered with Mr. Morris, who was supposed, as related in the "Sertum Orchidaceum," to be the first who succeeded in bringing it to blossom

som in this country. Nor was this the first time it blossomed at the Fence. The able gardener there, Mr. Appleby, had the gratification of seeing its flowers in high perfection three months previously. The pseudo-bulbs were obtained from Demerara, and the culture adopted by Mr. Appleby, he observes, was much the same as is employed by other cultivators for this interesting tribe of plants, with this difference, that he "breaks the peaty turf into very small lumps, and puts these into the pot (previously well drained) as lightly as possible; thus affording free egress to the roots, which run up and down amongst it surprisingly. No potsherds are employed at all. During the growing season water is used freely, but withheld in a great measure, though not entirely, during the dormant season."—Mr. Schomburgk found this plant in British Guiana, growing on the Ela-Palm, Mauritia *flexuosa*. Besides the rich golden colour of its flowers (which had induced us to give the species the MSS. name of *chrysanthus*,) the species is readily known from its congeners by the very long and narrow foliage.

Descr. *Pseudo-bulbs* very long, oblong, tapering at both extremities, clothed with the very copious sheathing bases of the old foliage. *Leaves* several from the apex of the bulb, a foot and a half long, linear-ensiform, acuminated, striated. *Scape* from the base of the bulb, pendent, bearing many rich, golden *flowers*, each subtended by an ovato-lanceolate, greenish *bract*. *Petals* and *sepals* uniform, small, roundish-ovate, approximate, and all spreading to one side, almost reflex, purplish-green. *Lip* inflated, semiglobose, rich orange-coloured without and dappled, the mouth shaped like that of a Helix, the edge spreading, on each side having a reddish fringe, and at the apex a shorter one of a deep blood-color. *Column* very short and thick, yellowish as well as the anther-case. *Pollen-masses* as in Catasetum.

Fig 1. Column and Lip. 2. 3. Pollen-masses;—*magnified*.

Published by Curtis, Sharrard & Co. Sept 1 1840

PASSIFLÓRA ONYCHÍNA. LIEUT. SULIVAN'S PASSION-FLOWER.

Class and Order.

MONADELPHIA PENTANDRIA.

(Nat. Ord.—PASSIFLOREÆ.)

Generic Character.

Calycis tubus brevissimus, faux corona filamentosa multiplici ornata. *Bacca* sæpius pulposa, rarius submembranacea. *D C.*

Specific Character and Synonym.

PASSIFLORA *onychina ;* ebracteata, foliis trilobis cordatis glabris, laciniis oblongis obtusis subæqualibus obscure serrulatis, petiolis 4—6-glandulosis, pedunculis foliorum longitudine, corona margine inflexa, serie intima radiorum erecta conica intus supra basin dentifera, extima duplici filiformi patentissima, intermedia subtriplici brevissima capitata, ovario tomentoso. *Lindl.*

PASSIFLORA onychina. *Lindl. in Misc. of Bot. Reg.* 1838, *n.* 1. *and Bot. Reg.* 1838, *t.* 21.

It appears that this pretty species of *Passion-flower* was first introduced to this country by B. J. SULIVAN, Esq., of H. M. S. Beagle, who brought seeds from the Botanic Garden of Rio de Janeiro to that of Sir CHARLES LEMON, Bart., at Carclew, Cornwall, in the year 1827. Our Glasgow Botanic Garden is indebted to Mr. LOWE of Clapton for the plant, and it is now not uncommon in our stoves, flowering in September and diffusing a very agreeable fragrance.

DESCR. Climbing. *Stems* slender. *Leaves* deeply three-lobed, cordate at the base, the lobes oblong-obtuse, entire or

or very indistinctly serrated, dark green above, pale beneath. *Petiole* shorter than the leaf, with three to five or six glands upon it. *Stipules* small, ovate, acuminate. *Tendrils* simple. *Peduncle* axillary, one-flowered, much longer than the petiole. *Flowers* much smaller than those of the common blue Passion-flower. *Sepals* and *petals* about equal in length, palish-purple, the former greenish on the outside and with a curved hook below the point; all of them oblong, obtuse. *Nectary* exceedingly beautiful; the principal ray with a band of white at the middle of the filaments, blue-purple at the apex, at the base, as well as the inner rays, red-purple. *Styles* and *stamens* green, dotted with purple.

Pub by S Curtis Glazenwood Essex Sept.r 1. 1840.

Hotéia barbáta. Bearded Hoteia.

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Class and Order.

Icosandria Digynia.

(Nat. Ord.—Rosaceæ.)

Generic Character.

Calyx 5-partitus, lobis erectis obtusis, parte adherente subturbinata. *Petala* 5 spathulata. *Stamina* 10. *Styli* 2. *Stigmata* obtusa. *Ovarium* calyci semiadnatum vel sublibera biloculare, loculis multi-ovulatis; ovula anatropa adscendentia. *Carpella* 2 calyci semiadnata vel sublibera, bilocularia apice bivalvia, valvis introflexis placentariis loculi fere ad mediam partem seminiferis. *Semina* scrobiformia, abortu in quoque loculo solitaria vel duo, rarius tria, testa basi et apice ultra nucleum elongata cellulosa. *Morr. et Dec.*

Specific Character and Synonyms.

Hoteia* *Japonica;* foliis tripinnatisectis, petiolis ad nodos pilosis coloratis, foliolo terminali ovato basi et apice attenuato, omnibus supra ad nervum hispidulis, floribus albis. *Morr. et Decaisne.*

Hoteia Japonica. *Morr. et Decaisne in Ann. des Sc. Nat. 2de Ser. p.* 316. *t.* 11.

Spiræa barbata. *Wall. Cat. n.* 705. *Lindl. Bot. Reg. t.* 2011.

S. Japonica. *Hort.*

S. Aruncus. *Thunb. Fl. Jap. p.* 211 *?*

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* Dedicated to a Japanese Botanist, Ho-tei, whom M. Siebold has mentioned in his notice of the Botanical Literature of Japan. (Sieb. in Act. Nat. Cur. v. 14. Part II. p. 693.) This work, entitled "Soo-Kwa-S'jua," includes descriptions of more than three hundred and fifty plants, natives of China and Japan, cultivated in the gardens there, and accompanied by eighty plates, elegantly designed by M. Siebold. The rich library of M. De Lessert contains a collection of Japanese botanical drawings, executed with great accuracy, among which we recognised several of our plants.

A Japanese plant, from whence the species was introduced by M. von Siebold to the gardens in Belgium. From that country, Mr. M'Koy kindly sent it to the Botanic Garden at Glasgow. Dr. Wallich, however, appears to have the credit of first finding the species in Nepal, Gossain Than, and Kamaon, and applied to it the name of *barbata*, which on every account is to be preferred to that of *Japonica*. The Genus, with the habit of Spiræa *Aruncus*, is nearly allied to Astilbe of Don, differing from this latter chiefly in the presence of petals. The Tiarella *triternata* of Ventenat, which Mr. Don refers to Astilbe, is, by Messrs. Morren and Decaisne, considered rather to belong to Hoteia. Our plant, though making little show on paper, is elegant and graceful in its foliage and feather-like flowers. It is hardy and flowers with us in May.

Descr. *Stem* herbaceous, two to four feet high. *Leaves* alternate, bi-triternate; *leaflets* ovate, acute, sharply serrated. *Petiole* often tinged with purple, incrassated at the base, and where, at its point of union with the stem, are several spreading hairs, whence the specific name of Dr. Wallich. *Stipules* ovate, acute, entire, membranaceous, deciduous. *Panicle* terminal, many-flowered. *Peduncle* and its branches downy, bracteated; *bracts* numerous, small, foliaceous. *Flowers* white. *Calyx* glabrous, deeply five-cleft. *Corolla* of five spreading, spathulate *petals*. *Stamens* ten, exserted. *Ovaries* two, their base united and adnate with the calyx.

Fig. 1. Flower. 2. Section of a Flower (from Morren and Decaisne's figure). 3. Section of the Ovary, from ditto:—*magnified*.

Pub by S Curtis Glasswood Essex Sept 1

T Hulme Delt

Céreus speciosíssimus; hybridus. Splendid Cereus; hybrid *var.*

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The Crimson Creeping Cereus, garden *variety*. *Lindl. Bot. Reg. t.* 1565.
Cereus Smithii. "*Hort. Angl.*"—*Pfeiff. Enum. Cact. p.* 111.
Cereus Mallisoni. *Hort.*

Although this beautiful Cereus is distinctly stated by Dr. Lindley to be a hybrid production, raised by Mr. Mallison, gardener to Sir Samuel Scott, from seed of Cereus *speciosissimus*, fertilized by C. *flagelliformis*, and although this circumstance is quoted by Dr. Pfeiffer, yet this author raises it to the rank of a species, and defines it as "C. *Smithii*; suberectus ramosus 6-angularis viridis, ramis junioribus purpureis sinubus latis angulatis, costis verticalibus repandis, areolis subremotis convexis, aculeis e tomento brevissimo albido centralibus 5—6 divergentibus rigidis fuscescentibus, exterioribus setaceis flavis deorsum spectantibus." It is a ready flowerer, and a great ornament to the Cactus-house.

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W Fitch del.

Pub. by S. Curtis Glazenwood Essex Sept.1 1840.

Catasétum integérrimum. Entire-lipped Catasetum.

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Class and Order.

Gynandria Monandria.

(Nat. Ord.—Orchideæ.)

Generic Character.

Perianthium sæpius globosum, nunc explanatum. *Sepala* et *petala* subæqualia. *Labellum* crassum, carnosum, nudum, ventricosum vel explanatum fimbriatum ; sub apice saccatum, obsolete trilobum. *Columna* erecta, aptera, libera, apice utrinque cirrhosa. *Anthera* subbilocularis, antice truncata. *Pollinia 2,* postice biloba vel sulcata ; *caudicula* maxima nuda demum elastice contractili ; *glandula* cartilaginea subquadrata.—Herbæ *terrestres vel epiphytæ ; caulibus brevibus fusiformibus vestigiis foliorum vestitis.* Folia *basi vaginantia, plicata.* Scapi *radicales.* Flores *speciosi, racemosi, virides, nunc purpureo-maculati.* *Lindl.*

Specific Character and Synonyms.

Catasetum *integerrimum ;* foliis oblongis latissimis apice acuminatis, sepalis petalisque acuminatis, labello cucullato crassissime carnoso, ore contracto integerrimo.

(α.) *purpurascens ;* floribus purpurascentibus, labello majore subtus obtusissimo.

(β.) *viridiflorum ;* floribus viridibus, labello minore subtus minus obtuso. (Fig. A.)

Sent from Guatemala by Mr. Skinner to the late Duke of Bedford at Woburn Abbey, where it gives us inexpressible pleasure to know that the princely gardens are fostered by the present noble proprietor. The species is a very distinct one, having a lip with the mouth considerably contracted, and quite entire.

Descr.

Descr. The *pseudo-bulbs* I have not seen: they are probably not different from the other species of the Genus. The *leaves* are unusually large, four inches and more broad, thin and membranous, many-nerved, acuminated at the point. *Scape* much thicker than a swan's quill, jointed, with a scale at each joint. *Flowers* large, secund, diffusing a peculiar and heavy smell. *Perianth* forming an arch over the column and pointing forward. *Sepals* and *petals* nearly equal, ovato-lanceolate, acuminate, concave, green tinged with purple; the *petals* blotched with red purple, (in β, green, with reddish spots within). *Labellum* large, cucullate, beneath very obtuse in α; in β less so:—the *mouth* nearly circular, contracted, a little inflexed and quite entire; the substance very thick and fleshy, externally pale green tinged with purple, internally yellow, and blotched with very deep purple. *Column* and *setæ* as in C. *tridentatum*.

A. Flower of var. β: *nat. size*.

FRANCÓA RAMÓSA. WHITE-FLOWERED FRANCOA.

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Class and Order.

OCTANDRIA MONOGYNIA.

(Nat. Ord.—FRANCOACEÆ. *Ad. de Juss.*)

Generic Character.

Calyx 4-partitus, persistens. *Petala* 4. *Stamina* 8 fertilia, totidem sterilia minuta cum iis alternantia. *Germen* 4-sulcatum. *Stigma* sessile 4-lobatum. *Capsula* 4-loba, 4-locularis, polysperma. *Semina* angulo interiori loculorum inserta.

Specific Character and Synonyms.

FRANCOA *ramosa;* foliis sessilibus lyrato-pinnatifidis lobis lateralibus approximatis sæpe coadunatis, scapo ramoso, floribus albis, stigmatibus obscure bilobis.
FRANCOA appendiculata. *Don, in Ed. N. Phil. Journ.* 1828, *p.* 52. *Sw. Brit. Fl. Gard. N. S. t.* 223. *Hook. et Arn. in Bot. Misc. v.* 3. *p.* 339.

This white-flowered FRANCOA was found at Valparaiso by Mr. CUMING, (n. 779 of his Collection), and at Quebrada de las Lacunas, near Valparaiso, by Mr. BRIDGES (his n. 197) in 1832. Seeds were sent over about that time, and the plant has been raised in our gardens, and proves as hardy as the better known F. *appendiculata*. Although it is considered by many Botanists that there are three species of FRANCOA, namely, F. *appendiculata* (CAV.), F. *sonchifolia* (CAV.), and our present one, yet it appears to us very doubtful if it would not be more correct to consider them as varieties of the original "LLAUPANKE *amplissimo sonchifolio*" of FEUILL.,

Feuill., Chil. v. 2. t. 31. Our native plants exhibit considerable discrepancies, and, certainly, in a garden, the Francoas are liable to much variation, in their leaves, in the colour of the flowers, and in the more or less entire apex of the stigmas.

Fig. 1. Stamens, Nectaries, and Pistil:—*magnified.*

Chr. Curwood Lessex Oct. 1840.

Rhododéndron arbóreum; Cinnamomeum, floribus roseis. Tree Rhododendron; Cinnamon-leaved *var.*, with rose-coloured flowers.

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Class and Order.

Decandria Monogynia.

(Nat. Ord.—Ericeæ.)

Generic Character.

Calyx 4-partitus. *Corolla* infundibuliformis rarius campanulata aut rotata, nunc regularis nunc plus minus irregularis semper 5-loba. *Stamina* 10 (rarius abortu 6—9) corollæ non adnata ante et inter lobos sita, sæpius declinata exserta. *Antheræ* poris 2 terminalibus dehiscentes. *Capsula* 5-locularis, 5-valvis, aut 10-locularis 10-valvis septicido-dehiscens. *Semina* axi columnæ angulo adnata, compresso-scrobiformia subulata.—Frutices *rarius* arbores. Folia *sempervirentia petiolata integerrima.* Flores *in corymbos terminales dispositi.* Alabastra *floralia squamosa.* Corollæ *conspicuæ purpureæ albæ vel flavæ. D C.*

Specific Character and Synonyms.

Rhododendron *arboreum;* caule arboreo, foliis lanceolatis glabris subtus lepidotis micantibus, floribus conferte corymbosis, ovario pubescenti-tomentoso 8—10-loculari. *D C.*

Rhododendron arboreum. *Sm. Ex. Bot. t.* 9. *Wall. Cat. n.* 755. *Hook. Ex. Fl. t.* 890.

(δ.) *Cinnamomeum;* foliis subtus cinnamomeis, floribus candidis purpureo et flavo-maculatis. *Wall. Cat. n.* 760. *Lindl. Bot. Reg. t.* 1982. *Hook. Bot. Mag. t.* 3290.

Subvar. floribus magnis roseis (Tab. nostr. 3825.)

The splendid specimen here represented of this rich variety of the *Tree Rhododendron* was obligingly communicated from

from the Manchester Botanic Garden by Mr. Campbell, in March, 1840, with the following remarks. "The plant from which it was taken has been in flower here about a fortnight, and has been much admired. We have flowering bunches on it upwards of double the size of that herewith sent, one of which I would gladly forward, but for the damage it would occasion to our plant." It differs from the Rhododendron described and figured by Dr. Lindley in Bot. Reg. vol. 10, t. 1982, (and our t. 3290 is the same var.,) by its different colour, and larger size of the corollas, which are also more undulated. "We measured one blossom this morning, which was two inches and a half in diameter."

How far the R. *campanulatum* of Don in Sweet's Br. Fl. Gard. t. 241. (and tab. 3759 of our Magazine) ought to be considered distinct from this, does with us admit of doubt. That species should have a five-, not a ten-celled ovary: but we have had no means of investigating that point. On comparing the figures, we find that our present species has the largest flowers, the colour is more varied, more yellow within the tube, and the deep sanguineous dots are much more numerous.

W. Fitch Del.

Pub by S Curtis Glazenwood Essex Oct.r 1 1840

CYSTÁNTHE SPRENGELIOÍDES. SPRENGELIA-LIKE CYSTANTHE.

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Class and Order.

PENTANDRIA MONOGYNIA.

(Nat. Ord.—EPACRIDEÆ.)

Generic Character.

Calyx foliaceus. *Corolla* clausa, calyptræformis, transversim dehiscens, basi truncata persistenti. *Stamina* hypogyna, persistentia. *Squamulæ* nullæ hypogynæ. *Capsula* placentis ab apice columnæ centralis pendulis, solutis.—Frutex *habitu* Sprengeliæ, Ponceletiæ, *et* Cosmeliæ, *nisi quod rami dum denudati annulati sunt. Br.*

Specific Name and Synonym.

CYSTANTHE * *sprengelioides.*
CYSTANTHE sprengelioides. *Brown Prodr.* 1. 555.

This curious shrub was discovered by Mr. BROWN in Van Diemen's Land. The specimen described (now three feet and a half high, and growing freely) was raised in 1836 at the Botanical Garden, Edinburgh, from seeds obligingly communicated by N. B. WARD, Esq., London, in the autumn before. I have no means of ascertaining to which of the varieties mentioned by Mr. BROWN it belongs.

DESCR. *Shrub* and its *branches* erect, glabrous, rigid. *Leaves* crowded, sessile, stem-clasping, ovate, acuminate, rigid, mucronate, reflected, serrulate, shining, persisting, many-nerved, nerves diaphanous. *Flowers* axillary, solitary,

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* From κύστις, a *bladder*, and ἄνθος a *flower*; from the bladder-like appearance of the flower-bud, while the calyptræ-form corolla is still attached to it.

tary, but crowded into capitula at the extremities of the branches. *Bracteæ* several, erect, distichous, in other respects resembling the leaves but smaller, and gradually passing into the submembranous *sepals*, which are still smaller. *Corolla* longer than the calyx, pale greenish-yellow, opening by circumscission about the middle, the upper portion crisped at its lower margin, and rising like a calyptra upon the summit of the elongated style, the lower part marcescent, marked by brown nerves. *Stamens* 5, hypogynous; *filaments* as long as the corolla, approaching below; somewhat spreading above, flattened, subspathulate but pinched laterally at the apex, crystalline upwards; *anthers* erect, attached by their back near the base, ovate, yellow, bisaccate at the base, cleft at the apex and opening within the cleft; *pollen* yellow, granules minute, spherical. *Pistil* longer than the stamens; *stigma* with five minute points; *style* colourless, tapering upwards; *germen* green, 5-lobular, 5-locular, loculaments with their apices surrounding the base of the style; placentæ suspended from the column at the apex of the loculaments, green and naked on their outer side, but covered with suspended ovules on the inner. *Graham.*

Pub by S. Curtis Glazenwood Essex Oct. 1 1840

Senécio Heritiéri; *var.* cyanophthalmus.
Heritier's Groundsel; blue-eyed *var.*

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Class and Order.

Syngenesia Superflua.

(Nat. Ord.—Compositæ.—Senecionideæ.)

Generic Character.

Capitulum homogamum discoideum aut heterogamum, fl. radii ligulatis fœmineis. *Involucri* 1-serialis nunc nudi nunc squamellis accessoriis calyculati squamæ sæpius apice sphacelatæ margine subscariosæ, dorso frequenter binervatæ. *Receptaculum* epaleaceum nudum alveolatumve. *Styli* fl. hermaphr. rami truncati apiceque solo penicillati ! *Achænium* erostre exalatum teretiusculum aut sulcato-angulatum. *Pappus* pilosus pluriserialis caducus, setis rectis subæqualibus tenuissimis vix scabris.—Herbæ *aut* Frutices *innumeri polymorphi. D C.*

Specific Character and Synonyms.

Senecio *Heritieri;* fruticosus, foliis petiolatis exauriculatis cordatis suborbiculatis 5—7-lobis supra araneosis demum glabris subtus albo-lanatis, pedunculis 1-cephalis glabriusculis, involucro glabro 15—20-phyllo.

Senecio Heritieri. *De Cand. Prodr. v.* 6. *p.* 409.

Cineraria lanata. *L'Hérit. Sert. Angl. t.* 25. *Curt. Bot. Mag. t.* 53. *Jacq. Coll. v.* 3. *p.* 177. *t.* 19. *f.* 3.

(α.) *Capituli* radio pallide rubro-purpureo, disco intense rubro-purpureo.

(β.) *Capituli* radio albo, disco intense cæruleo.

This very remarkable and highly beautiful plant was sent to me by Mr. Ferguson, the able Curator of the Belfast Botanic Garden, from Mr. Morrison, gardener to ——

Clelland,

Clelland, Esq., of Rosemount, near Belfast, in whose greenhouse it flowered in May, 1839. Notwithstanding the very unusual colour of the flowers for one of the Natural Order Compositæ, I have little hesitation in referring it to the well-known Canary plant, the Senecio *Héritieri* of De Candolle, the old Cineraria *lanata* of our gardens, and long ago figured in an early number of this Magazine. The foliage is the same and the structure of the flowers; but the colour of the blossoms is very different, and in our variety of a most unusual character. Compositæ, with a white ray and yellow eye or disk, are common, as every one knows, but I have never before met with any having a white ray and a blue disk. De Candolle in his observations on the Compositæ (Prodr. v. 6. p. 7,) remarks on the colour of the flowers, "Corollæ nunc *xanthicæ* (yellow being the type, but liable to pass into red or white, but never to blue), nunc *cyanicæ* (where blue is the type, but which may pass into red or white, never into yellow), in eodem capitulo, aut homochromæ seu discolores; ubi discolores ligulæ semper cyanicæ et tubuli xanthici! imo tubuli xanthici cum ligulati monstrosi evadunt, cyanici fiunt."

Not only in our plant is the lilac-coloured ray of the flower changed to white, and the deep lilac, or blood-red purple, of the ray changed to a very bright blue; but the stigmas, which are deep orange in the original stock, are all also intensely blue and the anthers are purple-black.

Fig. 1. Floret of the Ray. 2. Floret of the Disk. 3. Stigmas:—*magnified.*

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W. Fitch Delt
Pub. by S. Curtis, Glasshouse Street, Nov. 1st 1840

HYMENÓXYS CALIFÓRNICA. CALIFORNIAN HYMENOXYS.

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Class and Order.

SYNGENESIA SUPERFLUA.

(Nat. Ord.—COMPOSITÆ.—SENECIONIDEÆ.)

Generic Character.

Capitulum multiflorum discoideum, homogamum seu ligulis 8—10 uniserialibus fœmineis, fl. disci hermaphroditis tubulosis 5-dentatis. *Involucrum* biseriale, squamis rigidulis adpressis, interioribus longioribus. *Receptaculum* conicum e paleaceum alveolatum, glandulis parvis subonustum. *Stylus* disci ramis apice truncatis barbellatis. *Achænia* conformia turbinata villis sericeis erectis villosissima. *Pappus* paleaceus, paleis 5—8 inæqualibus membranaceis ovali-lanceolatis aristato-acuminatis erectis.—Herbæ *Americanæ erectæ ramosæ glabriusculæ, tritæ odorem* Anthemidearum *spirantes.* Folia *alterna aut in eodem caule rarius opposita, in lobos lineares multipartita et* Schkuhriæ *aut* Achyropappi *æmula.* Rami *apice nudi pedunculiformes.* Corollæ *luteæ. D C.*

Specific Name and Character

HYMENOXYS * *Californica;* annua erecta gracilis, foliis linear-pinnatifidis glaberrimis, pedunculis filiformibus monocephalis, involucri squamis subuniserialibus, pappi squamis 5 subulatis inæqualibus serratis.

For this pretty annual I am indebted to Mr. MOORE, who raised it at the Glasnevin Botanic Garden, from Californian seeds,

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* So called by CASSINI from the nature of the scales of the pappus ;—*υμην*, a *membrance*, and *οξυς*, *sharp*.

seeds, given him by Mr. Buist. It belongs to the subdivision Euheleniеæ, Div. Gaillardieæ, Subtribe Heleniæ, of the Senecionideæ of De Candolle; a groupe which includes genera not easily distinguished by tangible characters; but I think our plant may be referred, without any doubt, to the Genus Hymenoxys of Cassini, although the species hitherto described of it are natives only of Mexico, Peru, and Buenos Ayres. No doubt the species will prove a perfectly hardy annual; though Mr. Moore had the precaution to raise the present plants in a pot for the sake of affording them shelter. It flowered in September, 1839.

Descr. *Root* small, annual, fibrous. *Stem* a foot high, erect, slender, glabrous, branched. *Leaves* opposite, except the upper ones, two inches or more long, deeply cut in a pinnatifid manner into from five to seven distant, narrow, linear, entire lobes, quite glabrous, flaccid: uppermost ones linear and entire. *Peduncles* terminal, elongated, slender, single-flowered. *Involucre* hemispherical, of about ten to twelve lanceolate, acute, downy scales, in one series, or only slightly imbricated at the base. *Corollas* yellow. *Floret* of the *ray* ligulate, one to each scale of the involucre, three-toothed at the apex. *Achenium* slender, between cylindrical and fusiform, downy with five to six rather small, subulate, serrated scales. *Florets* of the *disk* tubular: the *tube* glandular below, enlarged upwards, five-toothed, the teeth clothed with thickened hairs near the points. *Branches* of the *style* obtuse, tufted at the apex. *Achenium* (sterile?) similar to that of the ray, the scales of the pappus larger. *Receptacle* large, conical, pitted, slightly hairy.

Fig. 1. Involucre. 2. Receptacle with a Scale of the Involucre and portion of a Floret of the Ray. 3. Floret of the Disk. 4. Anthers laid open. 5. Scales of the Pappus. 6. Floret of the Ray. 7. Scales of the Pappus: *magnified.*

3

Liátris propínqua. Sharp-scale Spiked Liatris.

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Class and Order.

Syngenesia Æqualis.

(Nat. Ord.—Compos.—Vernoniaceæ.)

Generic Character.

Capitulum multi (5—30) florum. *Involucrum* pauciseriale imbricatum. *Receptaculum* nudum. *Corolla* tubulosa ad faucem ampliata, lobis elongatis. *Styli* rami longe exserti cylindracei. *Achænium* circa 10-costatum subcylindraceum. *Pappus* 1—3 serialis, setis plumosis barbellatisve.—Herbæ *rarò* frutices. *Species omnes genuinæ ex Amer. Bor. ortæ.* Caules *sæpius simplices.* Folia *alterna integerrima aut in paucissimis dentata.* Capitula *spicata racemosa paniculata aut corymbosa.* Corollæ *purpureæ roseæ rarius variantes albæ. D C.*

Specific Name and Character.

Liatris *propinqua;* radice tuberosa, caule erecto simplici glabro, foliis remotis linearibus utrinque impresso-punctatis acuminatis basi longe attenuatis ciliatis inferioribus longissimis superioribus sensim minoribus bracteiformibus, capitulis axillaribus sessilibus v. brevissime pedicellatis laxe spicatis, involucro cylindraceo subdecemfloro basi attenuato bibracteato, squamis 20—24 erectis imbricatis herbaceis punctatis sensim brevi-acuminatis ciliatis superioribus longioribus margine tenui-membranaceis, ovario pubescente, pappi setæ corolla brevioribus subuniserialibus piloso-scabris.

Sent from the Horticultural Society's garden of Edinburgh in the autumn of 1839, under the name of L. *paniculata.*

lata. With that species it has no affinity ; nor can we find any described one, nor any in our extensive Herbarium of North American species, that will correspond with it. Its nearest affinity is perhaps with L. *spicata* (Willd.), or the variety called L. *hirsuta* (Bot. Reg. t. 595); but that is a much larger plant, the leaves are more numerous, the scales of the involucre fewer and remarkably obtuse. This and all the other species of Liatris are eminently deserving of cultivation in our gardens ; for they possess showy flowers, are perfectly hardy, and come to perfection at a season of the year when the summer flowers have disappeared.

Fig. 1. Single Floret. 2. Bristle from the Pappus. 3. Involucre laid open. 4. Scales of ditto. 5. Portion of a Leaf :—*magnified*.

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W Fitch del.

Pub by S Curtis Glazenwood Essex Oct. 1 1840

TAGETES CORYMBÓSA. CORYMB-FLOWERED MARYGOLD.

Class and Order.

SYNGENESIA SUPERFLUA.

(Nat. Ord.—COMPOSITÆ. Div. SENECIONIDEÆ.)

Generic Character.

Capitulum radiatum aut rarissime subdiscoideum. *Involucri squamæ* 1-seriales concretæ in cupulam campanulatam cylindricamve apice dentatam. *Receptaculum* subalveolatum. *Achænia* elongata basi attenuata, compresso-tetragona. *Semen* in achænio pedicellatum. *Pappus* simplex, paleis inæqualibus, aliis obtusis subconcretis, aliis aristatis elongatis liberis.—Herbæ *annuæ Americanæ sæpius fœtidæ raro suaveolentes, glandulis in foliorum laminis subrotundis pellucidis et in involucr. linearibus plus minus obsitæ.* Folia *opposita aut alterna, indivisa, serrata aut pinnatisecta, segmentis serratis integerrimisve.* Capitula *solitaria aut fasciculata plus minus pedicellata.* Corollæ *croceæ seu flavæ.* Ligulæ *sæpe (presertim in capitulis planis) bilabiatæ. DC.*

Specific Character and Synonyms.

TAGETES* *corymbosa ;* caule erecto angulato apice corymboso multifloro, foliis pinnatis, foliolis multijugis oppositis alternisque lanceolatis acutis basi inæqualibus angustatis argute serratis glanduloso-punctatis glabris, involucro

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* "A name which FUCHSIUS tells us is applied by APULEIUS to the *Tansy*, but which he himself adopts for a plant, not very dissimilar in foliage, now vulgarly called the *French* or *African Marygold.* He is followed by DILLENIUS, LINNÆUS, and every subsequent writer. DE THÉIS derives the word from *Tages*, an Etruscan deity, grandson of Jupiter, and teacher of divination; and supposes the beauty of its flowers may have procured the plant this mythological appellation. Of this intention we can find no traces in the above writers.

involucro ovali-tubuloso pentagono, pappi squamis tribus unica triplo longiore subulata.

TAGETES corymbosa. *Sw. in Brit. Fl. Gard. v. 2. t.* 151. *De Cand. Prodr. v.* 5. *p.* 643?

TAGETES tenuifolia. *H. B. K. Nov. Gen.* 4. *p.* 196. *non Cav. (fide DC.)* ?

Sent from Manchester by Mr. LEEDS, who received the seeds from Mexico. It flowered in the open border in September, 1839. We think there can be no doubt of this being the T. *corymbosa* of SWEET above quoted; it agrees in every essential particular. There, however, the corollas of the ray are stained all over with purplish-brown blotches: our plant is rather referable to SWEET's β. *lutea,* but there is a small deep-orange or blood-coloured spot near the base of the lamina in the present variety. We are doubtful about the synonym of DE CANDOLLE; because, though he refers to SWEET and adopts his name, he describes the ray as consisting of twenty large florets, and the entire flower of fifty florets.

Fig. 1. Involucre. 2. Floret from the Disk. 3. Ditto, from the Ray. 4. Receptacle of the Florets. 5. Portion of a Leaf seen from beneath :—*magnified.*

W Fitch Del.

Pub by Curtis Clarenwood Essex Nov.r 1840

Swan.S.

BARRINGTÓNIA RACEMÓSA. RACEME-FLOWERED BARRINGTONIA.

Class and Order.

ICOSANDRIA MONOGYNIA.

(Nat. Ord.—BARRINGTONIEÆ.)

Generic Character.

Calycis tubus ovatus; *limbus* bi- rariùs tri-partitus lobis ovatis obtusis concavis persistentibus. *Petala* 4 magna coriacea. *Stamina* ∞, multiserialia, filamentis filiformibus longis liberis basi in annulum brevem, concretis, antheris subrotundis. *Stylus* filiformis longitudine staminum. *Stigma* simplex. *Urceolus* ex apice ovarii ortus styli basin vaginans. *Ovarium* 4-loculare, loculis biovulatis. *Bacca* grandis, basi ventricosa sursum pyramidata tetragona limbo calycis coronata, matura 1-locularis, loculo obpyriformi fibroso ferè putamineo. *Semen* ovato-globosum pendulum sursum attenuatum; *embryo* exalbuminosus (Blume) ellipticus globosus; *radicula* supera confusa cum cotyledonibus arctissimè conferruminatis, et embryo ideó pseudo-monocotyledoneus.—Arbor *magna*. Folia *confertim opposita aut verticillata impunctata obovata*. Flores *ampli in thyrsum terminalem dispositi, pedicellis* 1-*bracteatis*. *D C.*

Specific Character and Synonyms.

BARRINGTONIA *racemosa;* racemo pendulo longissimo, foliis cuneato-oblongis acuminatis crenatis, fructu obtusissime tetragono pyramidato. *D C.*

BARRINGTONIA racemosa. *Blume in De Cand. Prodr. v. 3. p. 288. Roxb. Fl. Ind. v. 2. p. 634. Wight et Arn. Prodr. Fl. Penins. Ind. Or. v. 1. p. 333. Spreng. Syst. Veget. v. 3. p. 127. Wall. Cat. n. 3634.*

EUGENIA racemosa. *Linn. Sp. Pl. p. 673.*

SAMSTRAVADI. *Rheede, Hort. Malab. v. 4. t. 6.*

BUTONICA sylvestris alba. *Rumph. Amb. v. 3. t. 116.*

Obligingly

Obligingly sent in September, 1839, from the stove of Charles Horsfall, Esq., Liverpool, who received the young plant from Bombay when only a foot high. It was now, in three years' time, eight feet, erect, simple, and then threw out a flowering raceme, twenty-eight inches long, and at the same time it began to branch. In its native countries, which are the Molucca Islands, the Delta of the Ganges, Malabar, &c., it grows to a "stout timber." Now that Mr. Horsfall's plant has become branched, should it, as that gentleman observes, produce a raceme from each branch, it will, with its noble leaves, fifteen inches long and five broad, make a most splendid appearance.

Descr. *Trunk* lofty and straight. *Branches* numerous and spreading. *Leaves* alternate, on short *petioles*, obovato-lanceolate, ample, acuminate, serrated, smooth sides, penninerved, the nerves connected by transverse nervelets. *Raceme* in this instance terminal, pendulous, many-flowered: the *rachis* stout, everywhere perfectly glabrous. *Flowers* on short *pedicels*, with minute, caducous *bracteas*. *Calyx-limb* of two or three broadly-oval, obtuse, spreading, persistent lobes. *Petals* four, ovate, concave, yellowish, combined with the united bases of the copious stamens, and falling off with them. *Filaments* longer than the petals, red: *Anthers* rounded, two-celled, yellow. *Ovary* small, inferior, turbinate, "two-celled, with several *ovules* in each cell, attached to the middle of the partition." *Style* longer than the stamens, red, filiform. *Stigma* obtuse. "*Fruit* drupaceous, of the size of a large pullet's egg, and not unlike one in shape, only somewhat four-sided, nearly smooth on the outside, olive-green within, flesh rather spongy and brown, one-celled. *Seed* solitary, ovato-oblong."

Fig. 1. Reduced figure of Mr. Horsfall's plant, from a sketch by Miss Horsfall. 2. Leaf and part of a raceme, *nat. size*. 3. Petal and portion of the Stamens. 4. Pistil: *magnified*.

3832.

L.

W. Fitch Del.

Pub by S. Curtis Glazenwood Essex Nov.r 1.1840.

Monacánthus Bushnáni. Mr. Bushnan's Monk-flower.

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Class and Order.

Gynandria Monandria.

(Nat. Ord.—Orchideæ.)

Generic Character.

Perianthium explanatum. *Sepala* et *petala* æqualia deorsum versa. *Labellum* posticum, carnosum, indivisum, ventricosum, sepalis multo majus. *Columna* brevis, crassa, mutica. *Anthera* et *pollinia* Cataseti.—*Epiphytæ* Cataseti *habitu. Lindl.*

Specific Name and Character.

Monacanthus *Bushnani;* labello trilobo ventricoso, lobis lateralibus reflexis longe ciliatis, intermedio nudo valde acuto.

Monacanthus discolor. γ. Bushnani. *Hook. Bot. Mag. t.* 3601.

(β.) labelli lobis lateralibus longius fimbriatis.

Such as is well known to be the sportive nature of the epiphytal orchideous plants, and especially of the *Catasetum-group*, that it is very difficult to recognise the proper limits of species. A single blossom of a plant, which I consider to be specifically the same with the present, I had figured at letter A of the plate of Monacanthus *discolor*, as *var.* γ of that species. A slight variety of that again is here represented, and the plant is elevated to the rank of a species; but whether justly or not may admit of a question. The original M. *discolor* (Lindl., Bot. Reg. t. 1735) has the middle lobe of the labellum remarkably obtuse, and fringed to the very point:—my var. *viridiflorus* (Bot. Mag. t. 3601) has the middle lobe obtuse, but obscurely fringed: in our present plant the middle lobe is very acute, and quite

quite destitute of fringe. The colour of the flowers is strikingly different in all the three; here of a rich yellow green, the inside of the lip and the apex of the middle lobe of a deep golden brown colour. In *α* (Bot. Mag. l. c. fig. A.) the lateral lobes of the lip have a short fringe; here it is very long and reddish. The Glasgow Botanic Garden is indebted for the possession of this plant to Mr. Hoste (?), who kindly sent pseudo-bulbs of it to Mr. Murray in 1838. They flowered in November, 1839, in great perfection. With the exception of the points above alluded to, our description of Monacanthus *discolor* will be found characteristic of this. Had the Genus itself been founded upon the M. *discolor*, instead of the evidently abortive-flowered M. *viridis* (Lindl. Bot. Reg. t. 1752), we should think more favorably of it as distinct from Catasetum: and of the species at present known we would wish to confine it to M. *discolor* (Bot. Reg. t. 1735 and Bot. Mag. t. 3601), M. *fimbriatus* (Bot. Mag. t. 3708), M. *Bushnani* (Tab. nostr. 3832), and to the very beautiful and very distinct M. *roseo-albus*. These have a decidedly marked character distinct from Catasetum. Yet, strange to say, flowers of the two, and even of Myanthus also, have been found by Schomburgk growing from one and the same root! (See Lindl. Bot. Reg. t. 1951, and Hooker's Icones Plantarum.

Fig. 1. Column; and section of the Labellum:—*magnified.*

W. Fitch Del.

Pub by S. Curtis Glazenwood Essex Nov.1.1840.

PIMELÉA NÁNA. DWARF PIMELEA.

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Class and Order.

DIANDRIA MONOGYNIA.

(Nat. Ord.—THYMELEÆ.)

Generic Character.

Perianthium infundibuliforme, limbo 4-fido, fauce esquamata. *Stamina* duo fauci inserta laciniis exterioribus oppositа. *Stylus* lateralis. *Stigma* capitatum.

Frutices. Folia *opposita, raro alterna.* Flores *capitati, terminales, foliis involucrantibus sæpe dissimilibus, interdum connatis, rarius spicati v. axillares, quandoque dioici.* Perianthii *tubus in plerisque medio articulatus, articulo inferiore persistenti. Br.*

Specific Character and Synonym.

PIMELEA *nana ;* foliis alternis, rarius suboppositis, spathulato-linearibus, utrinque pilosis, uninervibus, floralibus rameis similibus ; capitulis terminalibus, multifloris ; stylo staminibusque limbo perianthii æquantibus. *Grah.*

PIMELEA nana. *Graham in Ed. Phil. Journ. for July,* 1840.

We received this plant at the Botanic Garden, Edinburgh, in 1839, from Mr. Low of Clapton. It is a native of the Swan River Settlement in Australia, and flowered abundantly in the greenhouse in the end of April, and in May and June. It is allied to P. *longiflora* (Bot. Mag., 3281) but is easily distinguished from this, by its much more humble growth, its single-nerved leaves, and its exserted stamens and style. It will probably be short-lived.

DESCR. *Stem* (eight inches high) woody, slender, erect, with alternate, ascending branches, its whole surface, (excepting

cepting the inside of the corolla, the stamens, and style,) covered with soft, white and spreading, simple hairs, mixed with others which are much shorter and more dense. *Leaves* (half an inch long, about one line broad) scattered, spathulato-linear, glaucous, rather paler and more hairy below than above, spreading, flat, with a conspicuous middle-rib, but no lateral nerves. *Capitulum* terminal, many-flowered; *involucre* similar to the stem leaves. *Perianth* white; *tube* green where it covers the germen, rather longer than the involucre, slender, having long, spreading hairs externally, and only short, dense, hairs within; *limb* somewhat irregular, segments imbricated, the upper and lower outermost, ovato-lanceolate, glabrous on their upper surface, the two lateral ones deflected. *Stamens* as long as the perianth; *filaments* glabrous, at first erect, afterwards spreading along the upper and lower segments of the limb, white; *anthers* brown, rhomboideo-oblong; attached by their back near the base, bursting along their sides: *pollen granules* spherical, of the same colour with the anthers. *Stigma* blunt. *Style* glabrous, subterminal, exserted, as long as the stamens. *Germen* pale green, ovato-oblong, with a small tuft of erect hairs on its apex, elsewhere glabrous. *Ovule* solitary, pendulous, filling the germen. *Graham*.

W. Fitch Del.et

Pub by S. Curtis Glazenwood Essex Nov.1 1840.

Calectásia cyánea. Bright-blue Calectasia.

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Class and Order.

Hexandria Monogynia.

(Nat. Ord.—Junceæ.)

Generic Character.

Perianthium inferum, tubulosum, hypocrateriforme, limbo petaloideo, sexpartito. *Stamina* 6, fauci inserta. *Antheræ* conniventes, lineares, basi insertæ. *Ovarium* 1-loculare 3-spermum : ovulis erectis. *Stylus* filiformis. *Stigma* simplex. *Utriculus* monospermus, tubo indurato perianthii inclusus.—Fruticulus *erectus, ramosissimus, foliis acerosis basi vaginantibus vestitus.* Flores *ramulos breves terminantes, solitarii.* Perianthii *tubus foliorum vaginis inclusus.* Limbus *pulcherrimè stellatus (unde nomen) azureus, æqualis, laciniis 3 exterioribus disco extùs pubescentibus. Br.*

Specific Name and Synonyms.

Calectasia *cyanea.*
Calectasia cyanea. *Br. Prodr. p.* 264. *Spreng. Syst. v.* 2. *p.* 112.
Huttia elegans. *Preiss MSS. Herb. nostr.*

Among the most beautiful of the floral productions of the South-western coast of Australia may assuredly be reckoned the Calectasia of Mr. Brown, which that distinguished Botanist calls "pulcherrimum genus, nulli cognito arcte affine," and which was first found by him between Cape Lewin and Bass Straits. We have lately received it, from King George's Sound, gathered by Mr. Baxter, and from the Swan River by Mr. Drummond and Mr. Preiss, a German

German Botanist. This latter Botanist sent his specimens under the impression that it was a new Genus, but it is certainly in no way distinct from the only known species of Calectasia. We figure it on account of its great beauty, a beauty which is scarcely altered by drying, for the form and colour in both leaves and flowers, is truly of that kind called *everlasting*; and partly with the hope that our cultivators may be induced to import this lovely plant, as an ornament to our greenhouses. Nothing can exceed the richness of the bright purple perianths and the contrasting deep orange-coloured anthers. It grows in sandy soil among shrubs. We shall copy from the description, kindly sent to us by Mr. Preiss, and made from the recent plant.

Descr. *Root-stalks* scaly, fibrous: fibres very long, nearly perpendicular, yellowish, somewhat woody, rigid. *Stem* somewhat of a shrubby character, and especially at the base thickly clothed with the dry remains of the sheaths of fallen leaves, about a foot high, slightly pubescent upwards. *Branchlets* opposite, rarely alternate, patent, an inch or more long, simple. *Leaves* acerose, channelled above, beneath convex, striated, scabrous, pungent at the point, articulated upon the sheathing base, and deciduous: those of the stem erect, of the younger branchlets more patent. *Flowers* from the apices of the branches, bright violet-blue, or, rarely, dirty-white. *Bracteas* ovato-lanceolate, sheathing, membranaceous, embracing the tube of the perianth, imbricated, concave. *Tube of the perianth* narrow, tapering below, yellow green; the segments (six) ovato-lanceolate, acute, nerved, quite glabrous above and concave, beneath silky. *Filaments* inserted near the mouth of the tube. *Anthers* erect, approximate, linear-oblong, deep orange, apparently opening by pores at the apex. *Ovary* ovate, three-lobed, on a thickened, but below attenuated stipes. *Style* longer than the stamens, flexuose, filiform. *Stigma* obtuse.

Fig. 1. Outer view of a Flower. 2. Perianth laid open. 3. 4. Stamens. 5. Pistil. 6. Leaf. 7. Apex of ditto:—*magnified*.

Pub by S Curtis Glazenwood Essex Nov.r 1 1840

ELÆODÉNDRON CAPÉNSE. CAPE ELÆODENDRON.

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Class and Order.

TETRANDRIA MONOGYNIA.

(Nat. Ord.—CELASTRINEÆ.)

Generic Character.

Calyx minimus 4—5 lobus. *Petala* 4—5 patentia basi lata. *Stamina* 4—5 petalis alterna. *Discus* carnosus circa ovarium. *Stylus* brevissimus. *Drupa* exsucca, nucleo lignoso 5-loculari, interdum abortu 2—4 locularis. *Semina* in loculis bina, abortu solitaria, erecta, oblonga, albumine carnoso, embryone centrali recto, cotyledonibus foliaceis, radic. inferâ.—Arbores *aut* frutices; *foliis glabris oppositis; pedunculis axillaribus subcorymbosis.*

Specific Character and Synonyms.

ELÆODENDRON *Capense;* erectum glabrum, ramis, scabropunctatis, foliis suboppositis petiolatis latis inæquilateris coriaceis obtusiusculis margine subrevolutis utrinque reticulato-venosis ovato-oblongis acuminatis, bicrenato-serratis v. ovalibus et ellipticis repando-serratis, serraturis inflexo-subaculeatis, paniculis axillaribus simplicibus dichotomis. *Ecklon et Zeyher.*

ELÆODENDRON Capense. *Ecklon et Zeyher, Enumeratio Pl. Afric. MSS.* 127.

This, notwithstanding its insignificant flowers, is a handsome evergreen, but will not endure our climate, even with the protection of a wall. We have three varieties, all free-growing, and differing chiefly in the breadth of the leaf and depth of the serratures, but though raised in different degrees of heat, not, I think, varying from this cause. We

are

are indebted for the possession of the plants to Capt. Macadam, R. N., who sent seeds from the Cape of Good Hope, to the Royal Botanic Garden, Edinburgh, in October, 1828.

The plant in common cultivation as Elæodendron *Capense,* is nothing else than a narrow-leaved variety of the common *Bay*. How this blunder came to be made and diffused, I cannot conjecture.

Descr. A *tree,* in the specimen described, eighteen feet high, and growing freely ; its *trunk* four inches in circumference near the base, and almost cylindrical for a considerable height, perfectly straight, its *bark* pale brown and warted ; the *branches* spreading and pendulous. *Leaves* (two inches and a half long, one and a quarter broad) petiolate, subopposite, lanceolato-elliptical, the sides somewhat unequal, coriaceous, distantly spinuloso-serrulate, slightly revolute in the edges, dark-green above, paler below, and often becoming rusty ; *petiole* about one-fifth of the length of the leaf, channelled above. *Corymbs* axillary, dichotomous, a single *flower* standing in the fork, and the branches supporting three flowers each ; *peduncle* compressed. *Bracteas* lanceolate, opposite, resembling much diminished leaves. *Flowers* minute, green. *Calyx* four-partite, green, flat, segments oblong. *Corolla* four-parted, twice as long as, and more delicate than the calyx, but in all other respects similar to, and its segments alternating with, it. *Stamens* four, opposite to the segments of the calyx, at first erect, shorter than the corolla, afterwards reflected between its segments, as well as the corolla and calyx persisting ; *filaments* green ; *anthers* oblong, yellow, bilobular, bursting along the face. *Germen* imbedded in a flat, green, fleshy drupe. *Style* single, shorter than the stamens, erect: *stigma* inconspicuous. *Fruit* yellow, oval, about the size of a hasel-nut, fleshy, and containing a hard nut with one to three cells. *Seeds* erect, compressed, almond-shaped, covered with a thick brown testa, having a copious *albumen,* and a central *embryo,* which is slightly curved, and passes from side to side of the greatest breadth of the seed, and from one extremity to the other. *Graham.*

Fig. 1. Flowering Branch. 2. 3. Flowers. 4. Drupe laid open. 5. Nut from the Drupe. 6. Drupe laid open.

Cyrtochílum maculátum; *var.* ecornutum.
Spotted Cyrtochilum; hornless *var.*

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Class and Order.

Gynandria Monandria.

(Nat. Ord.—Orchideæ.)

Generic Character.

Sepala lateralia patula libera. *Labellum* planum, oblongum, sæpius unguiculatum, integrum vel margine dentatum, apice angustatum, basi tuberculatum villosum aut pluries lamellatum. *Lindl. in Sert. Orchid.*

Specific Character and Synonyms.

Cyrtochilum * *maculatum;* pseudo-bulbis ovatis compressis subangulatis diphyllis basi foliosis, foliis late ligulatis acuminatis striatis apice oblique emarginatis, scapo simplici, bracteis brevissimis squamæformibus, sepalis petalisque carnosis obovato-lanceolatis acutissimis, labello membranaceo oblongo apiculato utrinque dentato lamellis duabus ad basin et corniculo utrinque, alis columnæ falcatis integerrimis.

Cyrtochilum maculatum. *Lindl. in Miscell. n.* 39. *April. Sert. Orchid. t.* 25. *Bot. Reg. t.* 44. "*Knowles et Westcott Fl. Cat. t.* 57."

(β.) foliis angustioribus, labello ad basi 4-lamellato, corniculis nullis. (Tab. nostr. 3836.)

Sent to the Woburn Collection from Mexico by John Parkinson, Esq., F.R.S., where it flowered in March, 1840. The

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* So named by Humboldt from κυρτὸς, *curved,* and χειλος, a *lip;* in allusion to the form of the labellum.

The leaves are certainly broader in the original C. *maculatum*; and there the lip has, according to the figure and description, two lamellæ at the base, and a short, distinct little horn on each side of those plates. Our plant has narrow leaves, and four plates on the labellum, united together at their base: and the two lateral ones represent the cornicula described by Dr. Lindley. In other respects the two plants sufficiently accord: and I can scarcely doubt but that they are slight varieties of one and the same species. The flowers are prettily marked but destitute of fragrance, and worthy of a place in every Orchideous collection.

Descr. *Pseudo-bulbs* ovate, compressed, four-angled, green, smooth, more or less sheathed at the base with two leaves. Two others spring from the apex of the bulb, five to six inches long, narrow-ligulate, striated, scarcely coriaceous. *Scape* about ten inches high, arising from the base of the bulb within one of the leaves, and bearing a *raceme* of six to nine *flowers*. *Petals* and *sepals* nearly equal, spreading, rather fleshy, ovate acute, or somewhat acuminated, yellow-green, with deep purple blotches. *Lip* oblong-ovate apiculate, three-lobed, striated, the lateral lobes near the base small, the intermediate one ovate, the apex reflexed:—the colour is sulphur yellow, the margin on each side at the base marked with a red line: the disk at the base bearing four, parallel lamellæ or plates, edged with brown, of which the two lateral ones are the shortest. *Column* short, with two projecting wings above in front. *Anther-case* hemispherical, yellow. *Pollen-masses* two, with a minute gland.

Fig. 1. Column and Lip.

Pub by S.Curtis Glazenwood Essex Dec^r 1.1840

Dendrobium moschatum. Musk-smelling Dendrobium.

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Class and Order.

Gynandria Monandria.

(Nat. Ord.—Orchideæ.)

Generic Character.

Sepala membranacea, erecta vel patentia, lateralibus majoribus obliquis cum basi producta columnæ connatis. *Petala* sepalo supremo sæpiùs majora, nunc minora, semper membranacea. *Labellum* cum pede columna articulatum vel connatum, semper sessile, indivisum vel trilobum, sepiùs, membranaceum, nunc appendiculatum. *Columna* semiteres, basi longè producta. *Anthera* bilocularis. *Pollinia* 4, per paria collateralia.—Herbæ *epiphytæ, nunc caulescentes nunc rhizomata repente pseudo-bulbifero.* Folia *plana sæpius venosa.* Flores *solitarii fasciculati, vel racemosi speciosi. Lindl.*

Specific Character and Synonyms.

Dendrobium *moschatum ;* caulibus teretibus pendulis, foliis oblongis seu oblongo-ovatis subcoriaceis lævissime striatis, racemis lateralibus laxis 6—8-floris, bracteis brevibus oblongis obtusis, sepalis oblongis obtusis patentissimis petalisque late ovatis obsolete tessellatis, labello unguiculato cochleariformi obtusissimo extus villoso.

Dendrobium moschatum. *Wall. in Lindl. Gen. et Sp. Orchid. p.* 82. *Don Prodr. Fl. Nep. p.* 34. *Wall. Pl. As. Rar. v.* 2. *p.* 83. *t.* 195.

Epidendrum moschatum. *Buchanan, apud Pymes, Ava, p.* 478, *cum Ic.*

Dendrobium Calceolaria. *Hook. Ex. Fl. v.* 3. *t.* 184.

Different as this may appear at first sight from the D. *Calceolaria* published by me in the " Exotic Flora," above quoted,

quoted, I am satisfied that they are but varieties of each other, and the name of *moschatum*, as undoubtedly the oldest, should be preserved to it: although the odour of musk is rather problematical, LINDLEY says, "the blossoms exhale a faint smell resembling that of Rhubarb, as I learn from Dr. WALLICH's MSS." We had compared the odour of a fine specimen which was flowering at Wentworth to that of the yellow Water-Lily (NUPHAR *lutea*); while the perfume diffused by the individual plant now before us, reminds us of the sweet-scented Wood-ruff (ASPERULA *odorata*). The leaves are undoubtedly extremely variable in form; linear-oblong in our specimen of the "Exotic Flora;" oblong in that represented by WALLICH; almost ovate in the present plant. The perianth of the flower is also more or less distinctly reticulated, and the labellum extraordinarily changed in colour, by age, when the whole, except the very downy apex, becomes suffused with a deep crimson tint. The plant is a native of Pegu, Ava, and Sylhet.

DESCR. The *flowering-stem* of this noble plant in Mr. HORSFALL's Collection, measures five feet three inches high, the side shoots are still taller, one of them six feet three inches, terete, striated, jointed, leafy to the top. *Leaves* alternate; in our specimen ovato-oblong, glossy, distichous, obscurely nerved. *Raceme* from the side of the stem, eight to ten inches long, pendent, bearing six to eight or nine *flowers*. *Bracteas* oblong, much shorter than the germen. *Flowers* large, tawny, suffused with rose-colour. *Sepals* and *petals* reticulated; the form oblong, the latter broadly-ovate, widely spreading. *Lip* slipper-shaped, tapering into a *claw*, the sides remarkably involute, outside and particularly above the middle from the base, pubescenti-hirsute, within at the base, are about six elevated lines, and at the sides of the base, on each side, a deep blood-coloured spot, the margin ciliated. *Column* very short, decurrent, so that the base of the labellum forms a kind of obtuse *spur*. *Anther* flattened at the top, purple. *Pollen-masses* of four *glands*, in two parallel pairs.

Fig. 1. Column. 2. Lip: slightly *magnified*.

Deutzia scabra. Rough-leaved Deutzia.

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Class and Order.

Decandria Trigynia.

(Nat. Ord.—Philadelpheæ.)

Generic Character.

Calycis tubus ovario adnatus turbinatus, limbus 5-, rariùs 6-, fidus. *Petala* 5—7 ovato-oblonga. *Stamina* 10, filamentis lineari-filiformibus apice tricuspidatis, antheris didymis cuspidi intermedia adfixis. *Ovarium* apice concavum. *Styli* 3—4 filiformes. *Capsula* globosa truncata umbilicata, stylis persistentibus aristata, 3 cocca, basi trifariàm dehiscens. *Carpella* chartacea dorso convexa lateribus compressa in medio ventre cavitate (ex propriâ membranâ facta) notata. *Semina* in quoque carpello 10—12 oblonga acuminata compressa. *Albumen* carnosum. *Embryo* inversis compressus, radicula longa.—Arbuscula *ramosissima, ramulis ex icone oppositis.* Folia *opposita petiolata ovata acuminata serrata, pilis stellatis scabra.* Flores *paniculati terminales. D C.*

Specific Character and Synonyms.

Deutzia* *scabra ;* foliis ovatis acutis argute serratis utrinque pilosis, racemis terminalibus tomentosis basi subcompositis, floribus sæpius trigonis. *Lindl.*
Deutzia scabra. *Thunb. Fl. Jap. p.* 10. *et* 185. *t.* 24. *De Cand. Prodr.* 4. *p.* 17. *Lindl. Bot. Reg. t.* 1718.
Joro vulgo Utsugi. *Kæmpf. Amæn.* 5. *p.* 854.

A Japan Shrub ; native of the mountains of that island, and introduced, through the Horticultural Society, by John Reeve,

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* So named by Thunberg, in honour of John Deutz, a Siniff of Amsterdam, and a patron of Thunberg.

Reeve, Esq. Its habit is that of Philadelphus; its foliage and its flowers similar, and so hardy, that it bears the climate of the West of Scotland, unharmed. Thunberg tells us, that the leaves are used for polishing hard substances, and Kæmpfer, that the wood is employed in cabinet-work.

Descr. *Shrub* four to six feet high, with copious, opposite, slender, *branches*, clothed with a pale brown *bark*, and *leaves*, which are also opposite, on short *petioles*, ovate, acute, or rather acuminate, roughish, serrated, veined in a pinnated manner, pale beneath. *Flowers* moderately large, white, in terminal *racemes*. *Pedicels* opposite, sometimes bearing two *flowers*. *Calyx* of five deep segments, the *tube* globose, adnate with the ovary. *Corolla* of five, nearly erect, oblongo-lanceolate, acute *petals*. *Stamens* ten, inserted at the base of the calycine segments, on the outside of an orange-coloured, fleshy disk or ring. *Filaments* erect, alternately shorter, all of them broad, linear, petaloid, three-toothed at the top, the middle tooth bearing the somewhat globose, two-celled *anther*, the lateral ones spreading. *Ovary* three-celled; *ovules* upon large, central, globose, fleshy, receptacles or *placentæ*. *Styles* three, filiform, longer than the stamens. *Stigmas* club-shaped.

Fig. 1. Calyx, Stamens, and Pistil. 2. Calyx and Pistil: the Ovary being cut through vertically:—*magnified*.

Pub.by S Curtis Glazenwood E. sex Dec.r 1 1840

Monolópia máJor. Larger Monolopia.

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Class and Order.

Syngenesia Superflua.

(Nat. Ord.—Compositæ.—Senecionideæ. *D C.*)

Generic Character.

Capitulum multiflorum heterogamum, *fl. radii* fæmineis ligulatis interdùm subbilabiatis, disci tubulosis hermaphroditis sterilibus aut masculis, tubo tenui hispidulo, fauce dilata. *Invol.* squama 8—10 uniserialæ ad medium concretes. *Recept.* convexum aut subconicum epaleaceum. *Antheræ* ecaudata. *Styli* radii rami cono brevi superati. *Achænia* calva glabra, *radii* obcompressa aut subtrigona, disci compressa.—Herbæ *Californicæ annuæ, erectæ, albo-tomentosæ.* Folia *alterna, oblonga-linearia, integra aut parcè dentata seu loculata.* Capitula *ad apicem caulis aut ramorum terminalia ebracteata.* Flores *lutei.*

Specific Character and Synonyms.

Monolopia* *major ;* foliis ligulatis obscure dentatis obtusis basi latioribus semiamplexicaulibus, ligulis involucro triplo longioribus.

Monolopia major. *De Cand. Prodr. v.* 6. *p.* 74. *Hook. Ic. Pl. t.* 4. *t.* 344. *Hook. et Arn. in Bot. of Beech. Voy. p.* 359.

Few persons on first seeing this rampant plant, with its dark green foliage, as growing in our gardens, (under the name too of "Helenium *Douglasii*") would suspect that it was the same with the small and hoary Monolopia *major* of De

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* From the Greek word μονολοπος, bearing a *single tunic,* or *garment,* in allusion to the structure of the Involucre. *De Cand.*

De Candolle ; yet such is really the case, and its fine large bright and deep yellow blossoms, continuing, as they do, in perfection for a great part of the summer months, render it really worthy a place in our gardens. It was introduced from California by Mr. Douglas, and has been extensively distributed by the Horticultural Society.

Descr. *Plant* annual. *Stems* two to three feet long in our gardens, (scarcely one foot in our wild specimens,) dichotomously branched and rather straggling. *Branches* terete, as thick as a goose-quill, green, covered with an arachnoid, woolly down. *Leaves* alternate, reflexed, three to five inches long, ligulate, or being broader below, ovato-ligulate, obsoletely toothed, spreading and more or less recurved, dark-green above, paler beneath, the base both above and below, more or less woolly. *Peduncles* terminal, solitary, one-flowered. *Involucre* broadly-campanulate, monophyllus, the tube broad, turbinate, very woolly, the limb spreading, cut into about eight to ten acute, triangular, scarcely villous lobes. *Receptacle* conical, dotted, epaleaceous. *Ray* of from eight to nine, large, ligulate *fertile florets*. *Corolla* with the tube cylindrical (swollen at the base), clothed with spreading, glandular hairs. *Lamina* broadly-ovate, large, cut into three deep lobes: at the base is a small spathulate, fimbriated appendage, so that the corolla may almost be called two-lipped. *Style* rather shorter than the tube. *Stigmas* slightly protruded. *Achenium* obovate, somewhat triquetrous. In the central florets, the achenium is similar, but a little broader; the corolla tubular, deep orange, with five glandular teeth. *Anthers* slightly protruded, and the branches of the style still longer.

Fig. 1. Section of the Involucre showing the Receptacle: *nat. size.* 2. Radial Floret with the appendage at the base of the Lamina. 3. Tubular Floret: *magnified.* 4. Lower Leaf: *nat. size.*

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Sida picta. Painted-flowered Sida.

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Class and Order.

Monadelphia Polyandria.

Generic Character.

Calyx nudus, 5-fidus, sæpè angulatus. *Stylus* apice multifidus. *Carpella* capsularia 5—30 circa axim verticillata, plus minùsve interse coalita, 1-locularia, mono aut oligosperma, apice mutica aut aristata.—Genus *polymorphum, in posterum jam docente cl. Kunth, dividendum ex fructû seminisque structurâ valdè diversâ, sed adhuc intactum hùc retinui ob innumeris species non satis cognitas ut in ordine carpologico locum obtineant. De Cand.*

Specific Character and Synonyms.

Sida (Sect. Abutilon) *picta;* fruticosa ramis herbaceis glabris, foliis longê petiolatis cordatis 3—5-lobatis glabris grosse serratis, lobis acuminatis, pedunculo axillari longo gracillimo unifloro, calyce late, campanulato basi obtuso, petalis erectis calyce triplo longioribus venis ramosis pictis.

Sida picta. *Gill. in Hook. et Arn. Bot. Misc. v.* 3. *p.* 155. (1832.)

Abutilon striatum. "*Dichs. in Botanist ined.*" *Lindl. Miscell. Not.* 1830, *p.* 39.

A native of the banks of the Uraguay and of Buenos Ayres, whence specimens have been transmitted to us by Dr. Gillies and Mr. Tweedie. The latter, many years ago, sent home seeds, and plants have been raised of which flowering branches were communicated to us by Mr. Mackay, of the College Botanic Garden, Dublin, Mr. Moore, of the Glasnevin Garden, and from the Botanical Gardens of Glasgow and Edinburgh. Hitherto it has been treated as a greenhouse plant; in all probability it will succeed

succeed in the open air, especially in the summer months, and its gaily-painted flowers render it highly worthy of a place in every Collection. It flowers during various months of the year, and is easily cultivated and propagated.

Descr. A small *shrub*, with herbaceous, green, rounded, glabrous, straight *branches*. *Leaves* on long, slender *petioles*, glabrous, cordate, from three to five-lobed, the lobes acuminated, serrated with coarse teeth. *Stipules* subulate, caducous, one on each side of the petiole. *Peduncles* axillary, solitary, more elongated, and slenderer than the petioles, often as long as the leaves, one-flowered, glabrous. *Flowers* large, handsome. *Calyx* somewhat campanulate, obtuse, and even truncate, and slightly ventricose at the base, downy, cut about half-way down into five equal, erect, acute, triangular segments. *Petals* erect, or but slightly spreading, concave, obovate, with a short claw, orange colour, beautifully marked with blood-coloured, branching veins. *Staminal tube* long: *Anthers* numerous, yellow. *Ovary* obtuse, hairy. *Style* purple upwards, filiform, dividing into five branches, each with a capitate *stigma*.

Fig. 1. Petal. 2. Pistil:—*magnified.*

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3.

GRABÓWSKIA DUPLICÁTA. TOOTHED GRABOWSKIA.

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Class and Order.

PENTANDRIA MONOGYNIA.

(Nat. Ord.—SOLANEÆ.)

Generic Character.

Calyx campanulatus regulariter 5-dentatus æstivatione valvari. *Corolla* e tubo brevi infundibuliformis, limbo 5-partito, laciniis patentibus reflexisve, quatuor æstivatione convolutiva, quinta externa marginibus suis vicinarum margines obtegens. *Genitalia* exserta. *Stamina* 5 æqualia, filamentis paulo supra tubi basin liberis, medio dense villosis (villis basin versus decrescentibus). *Stylus* teres, stigmate subcapitato aut læviter bifido. *Germen* 4-loculare, loculamentis 1-ovulatis? *Bacca* calyce persistente suffulta, globosa, dipyrena, pyrenis lignosis bilocularibus, loculis 1-spermis. *Embryo* hamato-curvatus cylindricus.—Frutex *habitu* Lycii *genuini ramosissimus, spinis axillaribus horridus; foliis sparsis integerrimis.* Flores *axillares c. fasciculis foliorum (ramulo non evoluto); aut subcorymbosi in ramulis summis (hinc in ultimis ramis quasi paniculati). Schlecht.*

Specific Character and Synonyms.

GRABOWSKIA * *duplicata ;* foliis longiuscule petiolatis orbicular-ovatis undulatis basi attenuatis apice acuminulatis calycis maturescentis ore intus dentibus 5-erectis instructo, laciniis lanceolatis acutis.

GRABOWSKIA duplicata. *Arn. in Linnæa. v.* 11. *p.* 485.

GRABOWSKIA

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* So named in compliment to a very excellent and liberal Silesian Botanist and Apothecary of Ohlaf, Mr. H. GRABOWSKI, author, in conjunction with Mr. WIMMER, of a *Flora of Silesia.*

GRABOWSKIA boerhaviæfolia. *Schlecht. in Linn. v. 7. p. 72.*
(quoad plant. Brasilianam) ? fide Arn.
EHRETIA duplicata. *Nees in Herb. Arn.*

The distinguishing characters of this Genus were pointed out by L'HÉRITIER when he figured his EHRETIA *halimifolia* (the LYCIUM *boerhaviæfolium*); for he says; "ad *Atropam* ex corolla infundibuliformi et staminibus distantibus fere referenda est, sed calyx vesicarius baccam recondens *Physalidem* rectius declarat."

SCHLECHTENDAL upon the same plant, a native of Peru, established the Genus GRABOWSKIA; and Mr. ARNOTT has added two species in the "Linnæa" above quoted, the one, G. *obtusa*, from Mendoza, at the eastern foot of the Chilian Andes, and our present plant, from Buenos Ayres and South Brazil. We have received wild specimens from Mr. TWEEDIE, and seeds were sent by the same meritorious Botanist to Mr. MOORE at the Glasnevin Botanic Garden, whence we were favoured with the flowering specimens in July, 1840. Mr. MOORE informs us that it requires the moderate heat of a stove to bring the plant into flower, and that even then the blossoms are produced but sparingly. These flowers are different in form and in colour from the GR. *boerhaviæfolia* figured by Dr. LINDLEY at tab. 1985 of the Bot. Register: but the specimen there figured seems to be from South Brazil, and is probably the GR. *obtusa* of ARNOTT. The true GR. *boerhaviæfolia* has dense corymbs of white flowers. The essential character of our species is the singular inflation at the base of the segments of the calyx, which rises into a tooth-like form.

DESCR. *Stems* shrubby, rambling, twelve feet high. *Branches* terete, bearing a straight spine from the axil of many of the upper leaves. *Leaves* alternate, very broadly ovate, or almost orbicular, exceedingly glaucous, waved, entire, slightly attenuated at the base into a moderately short *petiole*, and having a small acumen at the point. *Flowers* axillary, fascicled, from the upper leaves, which, sometimes becoming abortive, the inflorescence appears terminal and subcorymbose. *Calyx-tube* short, hemispherical: the *limb* of five, spreading, ovato-lanceolate segments, each with the base inflated into an evident tooth. *Corolla* hypocrateriform, greenish-white; the *tube* straight, very hairy within, the *limb* of five, ovate, veined, spreading segments. *Stamens* five, exserted, arising from near the middle of the corolla. Base of the *filaments* (like the inner part of the tube of the corolla) villous with jointed hairs. *Anthers* oval, yellow. *Germen* ovate, four-celled. *Style* rather longer than the stamens, white. *Stigma* capitate, green.

Fig. 1. Flower. 2. The same, with the Corolla laid open. 3. Section of the Ovary. 4. Stamen. 5. Hair from ditto:—*magnified.*

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Pub. by S. Curtis, Glazenwood, Essex, Dec.r 1. 1841.

Isoméris arbórea. Tree-like Isomers.

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Class and Order.

Hexandria Monogynia.

(Nat. Ord.—Capparideæ.)

Generic Character.

Sepala basi unita subpatens marcescens. *Petala* 4 oblonga sessilia (sub-) regularis. *Torus* carnosus, subhemisphæricus superne dilatatus. *Stamina* 6 : filamenta æqualia (æstivatione inflexa) longe exserta. *Capsula* magna, obovato-elliptica, inflata, coriacea, indehiscens, stipitata, stylo perbrevi subulato terminata. *Semina* plurima magna, lævia.—Arbor Californica *humilis vertice patente.* Radix *longe fusiformis.* Folia *approximata 3-foliolata.* Flores *magni, flavi, terminales, racemoso.—Tota planta odore* Polinisiæ. ***Nutt. in Torr. et Gr. Fl.***

Specific Name and Synonyms.

Isomeris * arborea. *Nutt. MSS. in Herb. Hook.—Torrey et Gray, Fl. N. Am. v.* 1. *p.* 124.

This curious plant, whose blossoms at first sight considerably resemble those of a small-flowered Edwardsia, was discovered by Mr. Nuttall in California, and sent both to the Royal Botanic Garden, Edinburgh, and to that of the Caledonian Horticultural Society, by Mr. Buist of Philadelphia in 1839. In the former establishment it has been kept in the greenhouse, and has not yet flowered ; in the second it was placed in the stove, and flowered in the beginning of May. Mr. James M'Nab thinks that the flowering was promoted, by his having forcibly retained the top in a depending position.

Descr.

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* So named from ισος, *equal,* and μερος *part,* in allusion probably to the regular petals, and the equal length of the stamens and pistil.

Descr. *Shrub* erect; *branches* hoary, covered with short, erect, blunt hairs. *Leaves* alternate, petiolate, trifoliate, without stipule; or stipetticles; *leaflets* ovato-elliptical, concave, soft, glaucous, scaly, mucronulate, without pubescence, excepting a very few hairs like those on the branches along the middle rib, which is prominent behind, *veins* oblique and obscure, scarcely seen on the back: *petioles* (an inch to an inch and a half long) rather shorter than the leaflets, spreading wide, hoary and pubescent like the branches, slightly compressed laterally, and obscurely grooved above. *Flowers* solitary in the axils of the leaves, but collected into terminal pseudo-racemes, pedunculate; *peduncles* nearly as long as the petioles, more green than them, but equally pubescent. *Calyx* campanulate, rather more green and somewhat less pubescent than the peduncle, truncated at the base, four-cleft, segments ovate, acute, connivent at the apices. *Corolla* yellow, faintly but offensively perfumed; *petals* four, imbricated, two approaching each other laterally in the upper part of the flower, two at the sides slightly removed from the upper ones and from each other below, ovato-elliptical, undulate, nearly without claws, more than twice as long as the calyx. *Disk* nectariferous, large and fleshy, shortly cylindrical, spreading and flat and pubescent on its upper surface, with a broad, connivent somewhat rugged tooth at its upper edge. *Stamens* six, twice as long as the petals, free, declined a little, inserted upon the disk towards its centre; *filaments* tapering a little, yellow, slightly pubescent; *anthers* erect, two-celled, bursting along the face, and while bursting, becoming gradually revolute; *pollen granules* very minute, yellow. *Pistil* abortive in the upper flowers, in the others declined, projected nearly twice as far as the stamens, on a rather stout, filiform, green, slightly pubescent footstalk, which is twice as long as the petals, or about as long as the stamens; *Germen* boat-shaped, inflated, concave above, unilocular, green, glabrous, nearly as long as the petals, apiculate from the persisting, short style; *ovules* very numerous, kidney-shaped, in two rows along each of the two sutures, both of which are prominent along the inside of the germen. *Graham.*

Fig. 1. Flower, with part of the Calyx and the Petals removed. 2. Petal, 3, Ovary laid open: *magnified.* 4. Fruit: *nat size.*

Pub. by S. Curtis Glazenwood Essex Jan.y 1.1841

AESCHYNÁNTHUS GRANDIFLÓRUS. LARGE-FLOWERED AESCHINANTHUS.

Class and Order.

DIDYNAMIA ANGIOSPERMIA.

(Nat. Ord.—CYRTANDRACEÆ.)

Generic Character.

Cal. tubulosus, 5-fidus, æqualis. *Cor.* hypogyna, tubo incurvo, limbi bilabiati labio sup. bilobo, inf. trilobo, lobis subæqualibus. *Stam.* 4, didynama, rudimentum quinti: *Antheræ* biloculares, per paria cohærentes. *Ovarium* elongatum annulo hypogyno carnoso cinctum. *Stylus* simplex; *stigma* clavato-bilamellatum. *Capsula* basi calyce stipata, elongato-siliquæformis, pseudo-quadrilocularis, bivalvis, valvis medio placentas, demum explanatas, margine seminiferas, gerentibus. *Semina* plurima, cylindrica, funiculo filiformi et chalaza incrassata in filum simplex v. bifidum excurrente utrinque aristata. *Albumen* o. *Radicula* terete-uscula, umbilicum basilarem attingens.—Frutices *Asiæ tropicæ, volubiles v. scandentes, ad articulos tumidos radicantes;* foliis *subcarnosis, pedunculis axillaribus terminalibusque;* floribus *speciosis aurantiaceo-coccineis. Endlich.*

Specific Character and Synonyms.

AESCHYNANTHUS* *grandiflorus;* foliis oblongo-lanceolatis acuminatis serratis obscure nervosis, umbella multiflora, laciniis calycinis ovatis, corollæ lobis omnibus rotundatis subæqualibus, stylo exserto.

AESCHYNANTHUS grandiflorus. *Don, in Gen. Syst. of Gard. and Bot. v. 4. p.* 656. *Paxt. Mag. of Bot. t.* 241.

TRICHOSPORUM grandiflorum. *Don, in Ed. Phil. Journ. v.* 7. *p.* 85.

INCARVILLEA parasitica. *Roxb. Corom. t.* 291.

* From the Greek words, αισχος, *modesty*, and ανθος, a *flower*.

A native of Nepal, and lately introduced we believe by His Grace the Duke of Devonshire from India to the stoves of our Botanic Gardens.

We are indebted for the noble specimens here figured to Mr. Sangton, Nurseryman, Kirkaldy, in whose hothouse it flowered in great beauty in September, 1840. The stems were about two feet high, scarcely tall enough to exhibit the scandent character. It succeeds well if planted in pots, though in its native country it is an epiphyte.

Descr. *Stems* creeping, rounded, herbaceous, (at least in the younger ones and branches,) succulent, nodose. *Leaves* opposite, four to five inches long, lanceolate, acuminated, rather obscurely serrated, of a texture between coriaceous and carnose, obsoletely penninerved, quite glabrous, petiolated; *petiole* short, rounded, thick. *Flowers* in lateral, or usually terminal, bracteated, umbels, drooping, very showy. *Peduncles* short. *Calyx* oblong, glabrous, rather fleshy, deeply five-lobed, the lobes ovate acute, nearly equal. *Corolla* two and a half to three inches long, rich orange-scarlet, clothed with fine, somewhat glandular down. *Tube* long, inflated upwards, curved, the mouth contracted; the *limb* two-lipped, upper lip with two projecting lobes, lower with three patent lobes, each lobe with a deep line down the middle. *Stamens* four perfect, didynamous, and one minute, abortive one. *Filaments* much exserted. *Anthers* of the two pairs oblong, two-celled, each pair conjoined by their tips, eventually separating. *Ovary* linear, surrounded at the base by a glandular ring: *style* white, thick, filiform: *stigma* capitate, formed of two plates.

Fig. 1. Lower portion of the Corolla, with the Stamens. 2. Calyx laid open, showing the annular Disk and Pistil:—*magnified.*

W Fitch del.

Pub by S. Curtis Glazenwood Essex Jan.y 1 1841.

Tropæolum Moritziánum. Mr. Moritz' Indian Cress.

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Class and Order.

Octandria Monogynia.

(Nat. Ord.—Tropeoleæ.)

Generic Character.

Cal. 5-partitus, lobo superiore calcarato. *Petala* 5, inæqualia, 3 inferiora minora aut evanida. *Stam.* 8 ab ipsa basi libera. *Carpella* 3, suberosa, reniformia, indehiscentia, hinc sulcata, rotundata. *Semina* magna, exalbuminosa, loculum secum implentia et hujus cavitati conformia. *Embryo* magnus, *cotyledonibus* 2 rectis crassis, junioribus distinctis, dein arcte conferruminatis et etiam cum spermodernate adhærentibus, ima basi subdistinctis, *radicula* intra cotyledonum processus latente, tubercula 4 mox radicellas proferentia gerente. *De Cand.*

Specific Character and Synonyms.

Tropæolum *Moritzianum ;* estipulata, foliis peltatis suborbiculatis læviter 7—9 lobatis basi transversim truncatis lobis apice callosis, petalis venoso-pictis subæquilongis calycem superantibus, 2 inferioribus cuneatis apice fimbriatis, 3 superioribus, spathulatis lamina fimbriata ungue longe ciliata, calcare petala $\frac{1}{2}$ excedente.

Tropæolum Moritzianum. *Klotzsck, in Ic. Pl. Rar. Hort. Berol. Fasc.* 3. *t.* 17.

The seeds of this new and very beautiful Tropæolum were given to Mr. Murray at the Glasgow Botanic Garden by Mr. Lockhart of Trinidad, who received them from Cumana. They soon vegetated, and the plants blossomed in July, 1840, for the first time, in the greenhouse. Others placed in the open border grew more vigorously, but showed

showed no disposition to flower. At Berlin, and no doubt in England, and, probably, in more genial seasons, in Scotland, it will blossom in the open air. The T. *Smithii*, De Cand., (T. *peregrinum* Sm., not Linn.,) answers to this somewhat in the general structure of the flowers, but is quite different in the foliage. It is a great acquisition to our collections.

Descr. *Stems* long and twining, branched, terete, succulent, green, often tinged with purple. *Leaves* on more or less twisted petioles, peltate, nearly orbicular, but truncate at the base, with from seven to nine shallow lobes at the margin, each lobe obtuse, but with a callous point of a dull orange colour. *Stipules* none. *Peduncles* much longer than the petioles, often twisted and scandent. *Flowers* moderately large, exceedingly handsome. *Calyx* of five very deep, ovate, bright-red, acute sepals: the *spur* twice their length, tapering, but obtuse and slightly bifid at the very point. *Petals* longer than the calyx: the three lower ones spathulate, bright orange, marked with red veins, the lamina deeply cut all round into a bright-red fringe, the claw, long, narrow, with long, red ciliæ: two upper petals scarcely longer than the lower, wedge-shaped, veined and coloured as the rest, deeply fringed at the broad apex, destitute of ciliæ. *Stamens* eight, shorter than the petals. *Anthers* subglobose; *pollen* green. *Ovary* deeply three-lobed: *Style* shorter than the stamens: *Stigma* unequally three cleft.

Fig. 1. Upper Petal. 2. Lower ditto. 3. Pistil:—*magnified.*

W.H. Fitch del.ᵗ Pub by S. Curtis Glazenwood Essex Janᵛ 1.1841.

Oncídium macranthérum. Large-anthered Oncidium.

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Class and Order.

Gynandria Monandria.

(Nat. Ord.—Orchideæ.)

Generic Character.

Perianthium explanatum. *Sepala* sæpius undulata lateralibus nunc sub labello connatis. *Petala* conformia. *Labellum* maximum, ecalcaratum cum columna continuum, varie lobatum, basi tuberculatum v. cristatum. *Columna* libera, semiteres, apice utrinque alata. *Anthera* semibilocularis rostello nunc abbreviato, nunc elongato rostrato. *Pollinia* 2, postice sulcata; *caudicula* plana, *glandula* oblonga.—Herbæ *epiphytæ nunc pseudo-bulbosæ.* Folia *coriacea.* Scapi *paniculati, vaginati, rarius simplices.* Flores *speciosi lutei sæpius maculati, raro albi.*

Specific Name and Character.

Oncidium *macrantherum;* pumilum, pseudo-bulbis ovatis compressis monophyllis, pedunculis subtrifloris folio brevioribus, petalis sepalisque ellipticis conformibus, labello ovali apice emarginato lateribus deflexis disco callo elevato pubescente basi bituberculato, columna brevi basi utrinque longe calcarata, rostello producto, anthera (magna) ovato-acuminata.

This is one of the many new Orchideous plants which along with still more interesting Cacteæ have been collected by Mr. Galeotti in the interior of Mexico, and sent by our late Consul there, Mr. Parkinson, to the princely collection at Woburn, where it flowered in April, 1840. It is quite unlike any other species of the Genus with which I am acquainted; but may, perhaps, rank near O. *pumilum* (Bot. Reg. t. 920).

Descr. *Pseudo-bulb* ovate, or oblong-ovate, an inch long, smooth, green, crowned with a single, oblong-lanceolate, rather rigid, but scarcely coriaceous *leaf*, acute, and very obscurely striated. On each side of the bulb, at the base, another similar leaf is produced, with a sheathing base, and these have two or three brown scales beneath them, from which the fibrous roots issue. *Peduncle*, or scape, from the bulb, one on each side, and consequently from the axil of the radical leaf, slender, two-flowered, much shorter than the leaves. *Perianth* of an exceedingly delicate cellular structure. *Sepals* and *petals* spreading, uniform, elliptical, yellow-green tinged with red. *Lip* longer than the sepals, oval, lemon-colour, blotched with pale purple, the margins deflexed, waved, the apex bifid, the disk with a downy, oblong elevation or crest, having two yellow tubercles at the base. *Column* short, green, slightly downy upwards, *rostellum* elongated, bifid, and there are two projecting spurs at the base, longer than the rostellum ; *stigma* with a deep purple border. *Anther-case* ovate, acuminated, as long as the rostellum. *Pollen-masses* two, deep-yellow, on a white caudicula, with a brown, oblong, *gland*, at its base.

Fig. 1. Back view of a Flower. 2. Front view. 3. Column and Lip. 4. Column from which the Anther is removed, exhibiting the rostellum. 5. Inner view of an Anther-case. 6. 7. Back and front view of the pollen-masses :—*magnified*.

Tuffen West lith.

Pub. by S. Curtis Glasenwood Place Jan.y 1 1841.

Málva laterítia. Pale Red-flowered Mallow.

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Class and Order.

Monadelphia Polyandria.

(Nat. Ord.—Malvaceæ.)

Generic Character.

Calyx cinctus involucro 3-phyllo, rarius 5—6-phyllo, bracteolis oblongis setaceisque. *Carpella* capsularia plurima in orbem disposita. *D C.*

Specific Name and Character.

Malva *lateritia;* prostrata, pilis divaricato-bipartitis simplicibus stellatisque subhirsuta, foliis longe petiolatis 3—5-lobis lobis oblongo-cuneatis inciso-dentatis, stipulis lato-ovatis herbaceis persistentibus, pedunculis axillaribus solitariis unifloris folio longioribus staminibus numerosis, ovariis hirsutis sub-13.

Our first knowledge of this plant is derived from Mr. Tweedie, who sent us specimens in 1836 from Buenos-Ayres (?), and from Entro Rios. In September, 1840, Mr. Mackay favoured us with living specimens, which flowered in the open border in Dublin College Botanic Garden; the seeds of which were derived from the same source.

Descr. *Stems* prostrate, obtusely angled, herbaceous, branched. *Leaves* two to four inches long (rounded petioles about the same) cordate, deeply three- to five-lobed, truncate at the base, sparingly hairy, the lobes broadly-oblong, cuneate. *Stipules* broadly-ovate, herbaceous, persistent. *Peduncles* axillary, solitary, longer than the leaves, slightly hairy, single-flowered, nerved and ciliated. *Calyx* hairy, deeply five-cleft, the segments ovate, spreading. *Involucre*

Involucre of three ovate, foliaceous bracteas. *Corolla* moderately large, of five spreading, rotundato-cuneate, unevenly truncated, pale red, somewhat roseate, oblique petals, the base with its short, ciliated claw, deep yellow, having a deep rose-coloured ray. *Column* of stamens short, hairy, deep yellow, conical ; free portion of the filaments numerous, spreading, moderately long, each terminated by a reniform, yellow, one-celled anther. *Ovaries* twelve to thirteen, united in a circle, clothed with long, upright hairs, each one-ovuled : *Style* dividing above the stamens into as many red branches as there are ovaries : *Stigmas* capitate, red.

Fig. 1. Petal :—*magnified.*

W. Plaw del.t

Pub. by S. Curtis Gad. mansworth

Orthosíphon incúrvus. Incurved Orthosiphon.

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Class and Order.

Didynamia Gymnospermia.

(Nat. Ord.—Labiatæ.)

Generic Character.

Calyx ovato-tubulosus, 5-dentatus, dentis superioris ovato-membranacei marginibus decurrentibus alatus, post anthesin deflexus. *Corolla* tubo exserto recto vel incurvo nec gibboso nec defracto, fauce æquali vel rarius inflato, bilabiata, labio superiore 3—4 fido, inferiore integerrimo concavo. *Stamina* 4, declinata. *Filamenta* libera, edentula. *Antheræ* ovato-reniformes, loculis confluentibus. *Stylus* apice clavato-capitatus, subinteger vel breviter emarginatus, stigmatibus in emarginatura subconfluentibus, nunc minutis nunc incrassato-capitatis. *Achenia* minutissima, punctulato-rugosa.—Herbæ *perennes, suffrutices-ve.* Racemi *simplices, sæpius elongati, rarissime ovato-spiciformes.* Verticillastri *sexflori, distantes, laxi.* Folia *floralia bracteæformia, ovata, acuminata, reflexa, pedicellis sæpius breviora.* Pedicelli *fructiferi recurvi. (Benth. Labiat. 25.)*

Specific Character and Synonyms.

Orthosiphon* *incurvus;* caule basi procumbente adscendente, foliis petiolatis oblongis crenatis utrinque angustatis tenuissime pubescentibus, verticillastris subsecundis, corollis villosis incurvis calyce triplo longioribus, fauce subæquali, staminibus corollam subæqualibus. *Benth.*

Orthosiphon incurvus. *Benth. in Wall. Pl. As. Rar.* 2. 15.

This plant, native of the mountains near to Silhet, was received at the Botanic Garden of Edinburgh, from the collection of His Grace the Duke of Northumberland at Sion

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* From ορθος, *straight,* and σιφων, a *tube,* from the usually straight form of the tube of the corolla.

Sion House, in October, 1839, and flowered in the stove in May and June following. Its structure is very curious, and the generic character, therefore, remarkably distinct.

Descr. *Stem* suffruticose, erect, branched. *Leaves* (three inches long, an inch and three quarters broad) ovate, petiolate, bright green, paler behind, rough on both surfaces. coarsely serrato-crenate, entire and wedge-shape at the base, middle-rib and oblique veins strong and very prominent behind, transverse reticulations distinct, though much more slender. *Spike* racemose, terminal, much elongated, many-flowered, unilateral; *rachis* furrowed, pubescent with dissimilar hairs, most of these being very short, others longer; *bracts* ovate, acute, reflected, green, persisting. *Whorls* four-flowered; *flowers* arising in pairs from one point, but having no common peduncle. *Pedicels* as long as the bracts. *Calyx* ten-nerved, bilabiate; the upper lip three-nerved, rounded, reflexed, entire, mucronulate in the centre, decurrent along the sides of the tube, between which narrow wings the tube is flat above; *lower lip* of four slender, subulate teeth, of which the lateral ones are shorter than the others, and broader at the base; nearly the whole of the calyx, as well as the pedicels, has similar pubescence to that on the rachis, and is reddish-green, with a pink tinge of the upper lip, which alone is glabrous. *Corolla* pale pink; *tube* greatly exserted, covered with dense, uniform, pubescence, equal to the longer hairs on the rachis, compressed laterally, dilated a little upwards, but contracted at the throat; *limb* bilabiate, the *lower lip* spoon-shaped, slightly undulate, entire, projecting forwards in a line with the lower side of the tube; the *upper lip* three-lobed, of which the central is notched, the lateral ones being entire and reflected. *Stamens* four, didynamous; *filaments* glabrous, adherent along the whole of the lower side of the corolla, in whose substance they seem to be lost, free in the throat and there divaricated after shedding the pollen, and scarcely exserted; *anther*—lobes divaricated, reddish, and applied face to face before bursting. *Pistil* intermediate in length between the longer and shorter stamens; *stigma* white, capitate, *style* recurved a little upwards at the apex, glabrous, and lying with the filaments along the lower side of the tube. *Germen* of four small, erect lobes, rising from a white, fleshy disk, which is much enlarged on the lower side, and curved upwards, forming a large, blunt, fleshy covering to the germen, notched at the apex for the passage of the style. *Graham.*

Fig. 1. Calyx from the side, and fig. 2, seen from the front: both *magnified.*

Pub by S Curtis Hazenwood Essex Jan? 1 1834

ANGELÓNIA CORNÍGERA. HORN-BEARING ANGELONIA.

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Class and Order.

DIDYNAMIA ANGIOSPERMIA.

(Nat. Ord.—SCROPHULARINÆ.)

Generic Character.

Cal. 5-fidus v. 5-partitus. *Cor.* tubo brevi, fauci fornicata, limbi subbilabiati plani labio superiore obtusissimo bilobo, inferioris, trilobi lobo medio basi saccato longiore rotundato. *Antheræ* loculi divergentes: *capsula* globosa vel ellipsoidea, bivalvis, valvulis integris medio septiferis, *Semina* membrana laxa inclusa.—Herbæ *Austro-Americanæ, erectæ v. procumbentes.* Folia *opposita v. superiora alterna.* Pedunculi *uniflori, solitarii, axillares v. racemosi. Benth.*

Specific Character and Synonym.

ANGELONIA *cornigera;* hirsutula, foliis lanceolatis ciliatis basin versus latioribus integerrimis, superioribus minoribus bracteiformibus, pedunculis solitariis gracilibus pilosis, labii inferioris segmento intermedio longicornuto, cornu apice bidentato.

ANGELONIA ciliata. *Gardn. MSS. in Herb. Brasil. n.* 2271.

Found in Brazil by Mr. GARDNER, in 1839, growing commonly in sandy places about Oeiras, and from thence to the province of Ceará. I have taken the liberty of altering Mr. GARDNER's name *(ciliata)* derived from a very obscure mark in the foliage to that suggested by the large and conspicuous horn-like appendage arising from the middle segment of the lower lip, and directed towards the centre of the flower. The specimen here figured was raised in the stove of the Glasgow Botanic Garden from seeds sent

by

by Mr. Gardner, and differs somewhat from the native samples, in having the leaves rather more attenuated at the base, and the floral ones longer, more remote, and less resembling bracteæ. In the native specimens, the flowers may almost be said to be in bracteated racemes. The flowers are extremely rich in colour, and a beautiful object for the microscope.

Descr. *Root* fibrous, annual. *Stems* a foot and more high, branched from the base, hirsute. *Lower leaves* opposite, lanceolate, the rest alternate but approximate, small and bracteiform, floriferous, almost cordate at the base, all of them slightly hairy, ciliate and entire. *Peduncles* single-flowered, solitary, slender, hairy, shorter than the floral leaves in our cultivated specimens; longer than they in the native specimens. *Calyx* small, two-lipped, of five deep segments $\frac{2}{3}$, segments linear-lanceolate, hairy. *Corolla,* as in the Genus, with an inflated, saccate tube, the *limb* plane, of five, deep, cuneate segments, two forming an upper lip, the other three a lower lip, the whole of a rich purple, deeper towards the mouth, the upper segments sprinkled with velvety dots, the intermediate one of the lower lip furnished at the base with a hornlike process, rounded and biaristate at the apex. *Capsule* elliptical, two-valved.

Fig. 1. Flower. 2. The horn from the lower Lip of the Corolla: *magnified.* 3. Capsule: *nat. size.*

HAIL TO CHRISTMAS.

All hail to Christmas!—to that genial time,
When skies are cold, but hearts within are warm;
When Friendship bids defiance to the clime;
And while rude winds the out-door scene deform,
Calls those she loves and shields them from the storm;
And bids them share in joys of holiest birth,
And all the dear enjoyments known to swarm
In rich abundance and in gentlest mirth,
Around that blissful shrine—a happy Christmas hearth!

All hail to Christmas!— tis a blessed season,
To gentle joys and sweet emotions given;
When ev'ry thought unkind appears a treason,
And friends unite, and foes are all forgiven;
And Love rules all the day, and then at even,
Affection's triumph is indeed complete,
While joy and transport make this earth a heaven;
And mirth and song unite in concord sweet,
Around the social hearth where friends and kindred meet!

All hail to Christmas!—give a hearty greeting,
To him who gladdens each domestic sphere;
And high and hallowed be the joy of meeting
With one who brings us bliss, so lov'd, so dear!
Who friends unites, that thro' the bye gone year,
Are widely parted on life's stormy ocean;
And bids them once more meet and mingle here,
And share again with sweet, sublime emotion,
Affection's joys refined, and Friendship's dear devotion!

All hail to Christmas!—many a time like this,
May we enjoy the blessings he bestows;
For many a year partake as pure a bliss,
And taste the joy the gentle spirit knows,
In the sweet intercourse we hold with those,
Who prize all home-born blessings, and confine
Their hopes and wishes, but to taste repose
In the dear circle of the hallowed shrine,
Where love and feeling meet and make the hour divine!

All hail to Christmas! and to ROWLAND, hail!
To beauty's self, who fairest bounty brings;
Who comes with gift and song, and fairy tale,
And at her feet, in rich profusion flings
Charms of a worth untold, all brightest things,
Meant to preserve her beauty from the tomb
Of fell decay; to steal from Time his wings,
And bid her fair, but fading charms assume
A fresh immortal glow—a bright eternal bloom!

All hail to Christmas! and to ROWLAND, hail!
Who comes with gifts of strange and magic power,
With spells all potent, never known to fail
In guarding youthful Beauty's fairy dower
Of charms and graces safe from storm and shower.
MACASSAR'S OIL; KALYDOR'S gentle balm;
And last a charm to soothe Affliction's hour,
ODONTO'S boon to shield from tooth-ache's qualm,
And o'er her being shed a sweet and heav'nly calm!

W Fitch. del.

Pub by S. Curtis Glaxenwood Essex Feb.y 1 1840.

Swan Sc

(3849 3850)

Músa supérba. Superb Plantain Tree.

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Class and Order.

Polygamia Monœcia.

(Nat. Ord.—Musaceæ.)

Generic Character.

Perigonium epigynum, bilabiatum, *labium inferius* tubulosum, postice usque ad basin fissum, apice quinquelobum, *superius* concavum, nanum, amplectens. *Stamina* 5, sexto postico abortivo. *Ovarium* inferum, triloculare. *Ovula* in loculorum angulo centrali plurima, biseriata, horizontalia, anatropa. *Stylus* crassus; *stigma* infundibuliformi-clavatum, breviter sexlobum. *Bacca* oblonga, angulata, trilocularis; *seminibus* plurimis in pulpa nidulantibus, sæpius effoetis farcta. *Semina* depressiuscula subglobosa, *testa* crustacea, atra, ad umbilicum impressa. *Embryo* orthotropus, fungiformis, in axi *albuminis* subfarinosi, *extremitate* radiculari umbilicum attingente, centripeta.—Herbæ *gerontogææ tropicæ et subtropicæ, in Americam introductæ, gigantæ; trunco e petiolorum vaginis longissimis, scapum radicalem, solo apice liberum, floriferum velantibus conflato, lamina foliorum amplissima, valde nervosa, floribus in axilla spatharum confertis, ebracteatis. Endl.*

Specific Character and Synonyms.

Musa* *superba;* subacaulis, spica nutante, bracteis cordato-ovatis concavis obtusis inferioribus persistantibus, perianthii labio superiore 3-partito lateribus revolutis, labio inferiore multo breviore 3-lobo lobo intermedio subulato

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* "The word is corrupted, or rather refined from *Mauz*, the Egyptian appellation of this valuable plant, and is made classical in the works of Linnæus, by an allusion to *Musa*, a Muse; or with much greater propriety, to Antonius Musa, the physician to Augustus, who, having written on some Botanical subjects, may justly be commemorated in the above name." *Smith in Rees' Cycl.*

subulato lateralibus multo longiore, filamentis 5 cylindraceis. *Grah.*

Musa superba. *Roxb. Pl. Corom. v. 3. t. 223. Fl. Indic. v. 1. p. 667. Ed. Car. et Wall. v. 2. p. 489. Roem. et Schult. Syst. Veget. v. 7. p. 1294. Spreng. Syst. Veget. v. 1. p. 833.*

I think there cannot be any reasonable doubt that the plant I have described is the M. *superba* of Roxburgh; though the description of the size and form of the stem, as given by him, does not accord with our plant. His plant is described as thirteen feet high; ours, though remarkably vigorous, is only five; his has a most remarkable conical base, seven and a half feet in circumference close to the ground, and four and a half immediately under the leaves; ours is hardly two feet and a half in circumference at the ground, and scarcely tapers at all. In almost every other respect the description of Roxburgh, where it does not contradict itself, is minutely applicable to our plant, very imperfectly indeed to his figure, which also differs greatly from the specimen I now describe. It is probable that the difference in the form of the stem arises from the age of the respective plants when they flowered. The figure in the Coromandel plants is perhaps taken from a plant which flowered in the Botanic Garden, Calcutta, thirty three months after the seeds from whence it sprung were sown; our plant blossomed in the end of August, 1840, fourteen months after the seed from which it sprung was put into the ground.

Every one who has visited the Botanic Garden of Edinburgh for some years past, has been struck with the brilliant success which has attended the cultivation of the many forms of Banana under the judicious management of Mr. M'Nab, and the immence quantity of high-flavoured fruit which has been produced; but nothing has afforded a greater triumph than the rapid perfection of this beautiful species from imported seed, though we are informed by Dr. Roxburgh that it does not yield a fruit which can be eaten, but one which resembles a dry capsule, rather than a berry. We learn from the same authority, that it is a native of the valleys in the southern parts of the Peninsula of India. In cultivation in the Botanic Garden, this, and all the varieties of fruit-bearing Bananas have been planted in large tubs containing extremely rich soil, have had much water, and

been

been kept in great heat. The flower-bud, as I have proved by cutting down full grown plants of Musa *rosacea* and *Cavendishii*, and I think also of M. *paradisaica*, remains at the root till a time after the plant has attained its full size varying according to its treatment, and then pushes its way upwards—its appearance at the top of the stem being preceded by the evolution of one or more leaves smaller than the rest.

Descr. *Stem* scarcely any, the petioles spreading nearly from the root upwards on all sides, and forming a pseudo-stem of nine inches in diameter at the base of the specimen described. *Flower-stalk* (about five feet high from the ground) cernuous. *Leaves* (five feet long, by one foot seven inches broad) lanceolato-elliptical, slightly unequal at the base, of a lively green on both sides, rather darker above, with a very narrow red edge, *middle rib* very strong, semicylindrical behind, with a deep rounded groove in front, transverse veins waved, especially near the base; *petioles* of the lower leaves fully one-third of the length of these, and of the same shape as the middle rib, slightly stem-clasping at their origin; *floral leaves* gradually smaller till the petioles pass into large, ovate *bracts*, the lower of which only retain a small portion of the leafy expansion at the apex, but these, like the others, spread in a roseate manner, green without, red-brown within, forming after a few only have expanded, a large, elegant, cernuous, imbricated, circular basin, of a foot in diameter, in the centre of which is the cordato-ovate mass of unexpanded bracts, surrounded by the *flowers*, which are half concealed among the imbricated expanded bracteæ. These are persistent, and always concave forwards, never reflexed; a few of the lower are empty, next are several with female flowers, the stamens being abortive, and then follow many, expanding in slow succession, deciduous, and covering flowers having the stamens fully developed, but with the pistil incomplete. *Perianth* single, superior, bilabiate; the *upper lip* (an inch and a half long) coriaceous, linear, erect, revolute in the sides, reflected at the apex, ultimately three-partite, with two slender, linear, internal segments laid along the fissures, the segments usually twisted together; *lower lip* embraced by the base of the upper, less than half its length, membranous, diaphanous, colourless, deflected, three-lobed, the centre lobe subulate, and very slender, the lateral lobes scarcely half the length of the other, ovate, subacute, spreading. *Filaments* five, epigynous,

nous, round, stout, erect, parallel to each other, and ranged in a row within the upper lip of the perianth. A large quantity of transparent, colourless, deliquescent jelly is discharged from the faux; between the style and the lower lip of the perianth. *Male Flower*. *Anthers* twice as long as the filaments, their apices reflexed, and projecting beyond the upper lip of the perianth, bilobular, the lobes narrow, red, laid along the face of the flat linear *connective*, towards its edges, and bursting anteriorly; *pollen* yellow, abundant, *granules* spherical. *Pistil* abortive, *style* subulate, equal in length to the filaments, and having a small dry *stigma*. *Female Flower.—Filaments* rather shorter than in the male flower, with scarcely any appearance of abortive anthers on their conical summits. *Stigma* large, white, slimy, capitate, irregularly and incompletely lobed. *Style* stout, erect, twice the length of the abortive stamens, and two-thirds of the length of the upper lip of the perianth. *Germen* angular, three-celled. *Ovules* very numerous, globular, shortly pedicellate, their attachment being in two rows to a central placenta in each cell. *Graham*.

Tab. 3849. Musa *superba*, on a very reduced scale, from a sketch sent by Mr. James Macnab. Fig. 1. Female Flower, *nat. size*.

Tab. 3850. Bractea, with its Male Flowers, *nat. size*, partially covered with the gelatinous fluid, which copiously exudes from the blossoms. Fig. 1. Single Male Flower, *nat. size*.

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W.H. Fitch del.t

Pub by S. Curtis Glazenwood Essex Feb.y 1.1841.

TROPÆOLUM BRACHÝCERAS. SHORT-SPURRED INDIAN-CRESS.

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Class and Order.

OCTANDRIA MONOGYNIA.

(Nat. Ord.—TROPEOLEÆ.)

Generic Character.

Calyx 5-partitus coloratus, laciniâ superiore basi calcaratâ, calcare libero intrà florem hinc hiante extrà stamina, lobis nunc liberis, nunc inter se variè coalitis. *Petala* 5, calyci inserta, ejusdem lòbis alterna, inæqualia, irregularia, 2 superiora sessilia remota, calcaris fauci infixa, 3 inferiora unguiculata minora interdùm abortiva. *Stamina* 8, filamentis liberis ovarium arctè cingentibus, disco (perigyno ?) insertis, antheris terminalibus oblongis erectis bilocularibus rimâ duplici dehiscentibus. *Carpella* 3 arctè connata in ovarium 1 trigonum. *Styli* 3 in 1 tristriatum filiformem connexi. *Stigmata* 3 acuta. *Carpella* 3 imo stylo seu fructus axi adnata, 1-locularia, 1-sperma. *Semina* magna, exalbuminosa, loculum suum implentia et hujus cavitati conformia. *Embryo* magnus; cotyledonibus 2, rectis, crassis, junioribus distinctis, dein arctè conferruminatis et etiam cum spermodermate adhærentibus, imâ basi subdistinctis; radiculâ intrâ cotyledonum processus latente. *De Cand.*

Specific Character and Synonyms.

TROPÆOLUM *brachyceras;* foliis peltatisectis segmentis 6—7 oblongo-obovatis integris, calcare conico obtuso calyce duplo breviore, petalis subconformibus emarginatis 2 superioribus cuneatis basi venosis.

TROPÆOLUM brachyceras. *Hook. et Arn. Bot. of Beech. Voy. p.* 14. *Lindl. Bot. Reg. t.* 1926. *Sweet Brit. Fl. Gard. t.* 370.

TROPÆOLUM tenellum. *G. Don, Gen. Syst. Gard. and Bot. v.* 1. *p.* 747.

Our

Our first knowledge of this delicate and sprightly species of *Indian Cress* was derived from specimens gathered in the Chilian Andes, not far from Valparaiso, by Mr. Bridges. By the natives it is called *Flor de Perdiz*. Mr. Cuming introduced it to our gardens, and it is now cultivated in several greenhouses besides those of Woburn Abbey, whence our specimen here represented was sent in June, 1840, by Mr. Forbes. It is a scandent plant; and if the stems and branches are allowed to grow in a compact manner around some upright sticks in a pot, the copious bright yellow flowers are well relieved by the delicate green of the foliage, and the effect is exceedingly pretty.

Descr. *Stems* very slender, filiform, herbaceous, pale green, scandent, much branched, a foot and a half to two feet long. *Leaves* peltate, petiolate, nearly orbicular in their circumscription, deeply six to seven-lobed, the lobes between oblong and obovate, very obtuse, entire, bright green above, somewhat glaucous and paler beneath. *Petioles* about an inch long, slender, wavy and often performing the functions of tendrils. *Peduncles* axillary, resembling the petioles, but longer, and a little stouter, single-flowered. *Calyx* bell-shaped, green, cut into five deep, ovate, rather acute, and moderately spreading segments; prolonged at the base, above the insertion of the peduncle, into a conical, obtuse *spur*, about half the length of the calyx. *Corolla* of five spreading, yellow *petals*, twice or thrice as long as the calyx, two-lobed at the apex; the three lower ones obovate, and of an uniform yellow colour; the two upper rather smaller, more cuneate, marked with purple veins at the bottom.

Fig. 1. Front view of a Flower. 2. Side view of the Calyx with Stamens:—*magnified.*

Aconítum Chinénse. Chinese Monks-hood.

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Class and Order.

Polyandria Pentagynia.

(Nat. Ord.—Ranunculaceæ.)

Generic Character.

Calyx petaloideus irregularis deciduus vel marcescens, sepalo nempè superiore concavo cassidæformi. *Petala* 2 superiora (cuculli, nectaria) longè unguiculata apice in saccum expansa sub galeâ recondita.—Folia *palmatisecta*.

Specific Character and Synonyms.

Aconitum *Chinense;* elatum robustum, caule glabro, foliis inferioribus petiolatis amplis profunde tripartitis segmentis cuneatis incisis lateralibus profunde bifidis, superioribus sessilibus 3—5-fidis laciniis subintegerrimis, racemis compositis, pedicellis superne pilosis, calycis galea elevatim venosa vertice obtusissima apice acuta, nectariis calcare brevissimo.

Aconitum Chinense. "*Sieboldt.*" "*Paxt. Mag. of Bot. Feb.* 1838," with a figure.

Of the history of this fine, showy Aconitum, I know nothing further than that the plant has been kindly communicated to me by Dr. Graham from the Edinburgh Botanic Garden, and that Steudel in his new "Nomenclator Botanicus," gives it as an inhabitant of China, and assigns Dr. Siebold as the authority for the name. It is probably cultivated in China: but of its specific merits I am altogether incompetent to speak, in a Genus so liable to vary, and so apt to produce hybrids. This is a stately and a hardy species; the blossoms copious, large, and of a peculiarly deep and vivid purple colour. The species will belong to De Candolle's Sect. IV. Napellus.

Descr.

Descr. *Root* perennial, tuberous. *Stem* five to six feet high, stout, erect, branched, green, tinged with purple, glabrous. *Lower leaves* large, and on moderately long, broad, and channelled *petioles*;—deeply cut, indeed to the very petiole, into three, cuneate segments, tapering at the base, irregularly toothed and cut towards the top, the side ones very broad and deeply divided, but not to the base, the whole is glabrous, strongly veined and reticulated: *upper leaves* sessile, gradually passing into more and more entire, small bracteas, among the upper flowers. *Racemes* large, compound, pedicels slightly hairy above. *Flowers* large, showy, of an intense and very bright blue colour. *Galea* semicircular, but moderately compressed at the sides, the apex acute. *Nectaries* on long, glabrous stalks, the saccate spur very short.

Fig. 1. Two of the Petals with the Nectaries, Stamens, and Pistils:—*magnified.*

Pub by S Curtis Glazenwood Essex Feb.1 1840

PENTSTÉMON HETEROPHÝLLUS. VARIOUS-LEAVED PENTSTEMON.

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their large, showy, purple flowers. It may be increased either by seeds or cuttings.

Descr. *Plant* from a foot to a foot and a half high, erect, branched, the *branches* slender and virgate, deeply tinged with purple. *Leaves* opposite, glabrous, narrow-lanceolate, often curved downwards, entire, acute, sessile, the uppermost ones, among the flowers, more narrow and almost exactly linear. *Peduncles* an inch or more long, bearing, above the middle, two opposite leaves or bracteas, and generally one, sometimes two flowers. *Calyx* very small in proportion to the size of the corolla, deeply cut into five linear-subulate, narrow, spreading, or recurved segments. *Corolla* an inch and a half long, red-purple, much paler in bud. *Tube* narrow at the base, gradually expanding upwards; *limb* two-lipped, upper lip two-, lower three-lobed; lobes very obtuse, spreading. *Stamens* inserted below the middle of the tube, four didynamous, and a fifth sterile filament, quite glabrous. *Anthers* cordate, deep purple. *Style* rather longer than the sterile filament.

Fig. 1. Calyx and lower part of the Corolla, with the Stamens and Pistil, slightly *magnified*.

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Oncídium Wraýæ. Mrs. Wray's Oncidium.

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Class and Order.

Gynandria Monandria.

(Nat. Ord.—Orchideæ.)

Generic Character.

Perianthium explanatum. *Sepala* sæpius undulata: lateralibus nunc sub-labello connatis. *Petala* conformia. *Labellum* maximum ecalcaratum, cum columna continuum, variæ lobatum, basi tuberculatum vel cristatum. *Columna* libera, semiteres, apice utrinque alata. *Anthera* semibilocularis, rostello nunc abbreviato, nunc elongato rostrato. *Pollinia* 2, postice sulcata; caudicula plana; glandula oblonga.—Herbæ *epiphytæ, nunc pseudo-bulbosæ.* Folia *coriacea.* Scapi *paniculati, vaginati, rarius simplices.* Flores *speciosi, lutei, sæpius maculati, raro albi. Lindl.*

Specific Name and Character.

Oncidium *Wrayæ;* pseudo-bulbis ovatis compressis sulcatis, foliis 2 terminalibus lineari-lanceolatis, scapo radicali elongato ramoso, floribus paniculatis, petalis sepalisque conformibus ovato-acuminatis patentibus ferrugineo-maculatis, labello unicolori late cuneato-obovato 3-lobo cristato, crista elevata acute triloba.

A native of Mexico, whence it was introduced to the stove of the gardens at Oakfield, near Cheltenham, by one of the most intelligent and enthusiastic of cultivators, Mrs. Wray of that place.

Descr. *Pseudo-bulbs* clustered, scarcely three inches high, ovate, furrowed, wrinkled and compressed. In the younger state of the bulb, it is accompanied by four leaves, two

two from the base and terminating a broad kind of sheathing scale, and two arising from the apex of the bulb, larger, but similar in shape to the radical ones, linear-lanceolate, somewhat coriaceous, and slightly spirally twisted. *Scape* from the base of a bulb and within the withered sheathing scale of a radical leaf, slender, tall, varying from three to five feet high, panicled above, and bearing copious bright coloured *flowers*, yellow, the sepals and petals alone blotched with deep rusty brown. These *sepals* and *petals* are alike in shape, ovate, acuminate, spreading. *Lip* large, broadly obovate, somewhat unguiculate, three-lobed, lobes rounded, entire, waved: at the base is an elevated, keeled ridge, or crest, presenting three acute lobes. *Column* short, yellow, in front at each side having a projecting, rounded wing. *Anther-case* hemispherical, yellow. *Pollen masses* two, the caudicle arising from an oblong, deep red gland.

Fig. 1. Germen, Column, and Anther. 2. Pollen-Masses:—*magnified.*

Pub by S.Curtis Glazenwood Essex Mar.1 1841

Cycnóches Loddigésii; *var.* leucochilum.
Mr. Loddiges' Swanwort; white-lipped *var.*

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Class and Order.

Gynandria Monogynia.

(Nat. Ord.—Orchideæ.)

Generic Character.

Perianthium explanatum. *Sepala* lateralia lanceolata, basi paululum sub labello connata; supremo angustiore. *Petala* latiora falcata decurva. *Labellum* liberum, ecalcaratum, columna continuum, lanceolatum, integerrimum, ungue abrupto calloso. *Columna* elongata arcuata teres, apice clavata, auriculis 2 falcatis ad latera clinandrii. *Anthera* bilocularis. *Pollinia* 2, postice sulcata, subpedicellata; caudicula lineari; *glandula* grossa.—*Habitus* Cataseti *(sed racemus lateralis)*. *Lindl.*

Specific Name and Character.

Cycnoches* *Loddigesii;* labello lanceolato planiusculo ungue brevi calloso, columna sepalum supremum æquante.

(β.) *leucochilum;* labello immaculato.

It is to Mr. Moss of Otterspool, Liverpool, that I am indebted for the noble specimen of a white-lipped variety of the Cycnoches *Loddigesii* of Dr. Lindley. The species is a native of Guiana, and may certainly be numbered among the most remarkable of this very remarkable tribe of plants, the Orchideæ, produced its large, fragrant blossoms in the stove,

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* So called by Professor Lindley, from κυκνος, a *swan*, and αυχην, the *neck*, in allusion to the column of this plant, which is gracefully curved, like the neck of a swan.

stove, in the month of August, 1840. Two other species of this Genus are now known in our collections, the C. *ventricosum* of Mr. Bateman's splendid "Orchidaceæ of Mexico and Guatemala," Tab. V., characterized by its pale, yellow-green, sulphur-coloured, spotless flowers, ventricose lip, and short column; and C. *maculatum* of Dr. Lindley's equally beautiful "Sertum Orchidaceum," readily known by its very long raceme of copious but comparatively small, yellow flowers, spotted with purple, and by the singularly fringed lip.

Descr. *Pseudo-bulbs* elongated, cylindrical, eight or ten inches to almost a foot in length, clustered, articulated and sheathed with the bases of former year's leaves, pale ashy grey, at the apex terminated by a leafy crown. *Leaves* lanceolate, acuminate, membranaceous, striated. *Scape* from near the top of the pseudo-bulb, long, drooping, arising from the side of the pseudo-bulb, bearing many flowers, no less remarkable in their form than in their size. *Sepals* unequal, the uppermost one, (or that corresponding with the column,) very narrow, linear-lanceolate, brownish-green, the two lateral ones much broader, oblongo-lanceolate, acuminate, greenish with transverse, brown blotches. *Petals* similar to them, but rather larger, spotless, and both of them falcate and decurved. *Lip* lanceolate, thick, fleshy in our specimen, ivory white tipped with yellowish-green, the base, or claw, where it unites with the column, spotted with red. *Column* remarkably long and slender, gracefully curved, like a swan's neck, as the generic name implies, semiterete, deep purple, above broader and somewhat winged, green, spotted with purple, just below which the small anther-case is placed.

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Pub. by S. Curtis Glazenwood Essex Sept. 1st 1821.

Stévia trachelioídes. Trachelium-leaved Stevia.

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Class and Order.

Syngenesia Æqualis.

(Nat. Ord.—Compositæ.)

Generic Character.

Capitulum 5-florum. *Invol.* cylindricum, squamis 5—6 acutis acuminatisve subæqualibus. *Recept.* nudum. *Achænium* stricto-nervosum angulatumve elongatum. *Pappus* paleis 1-serialibus nunc in iisdem aut sæpiùs in diversis individuis omnibus scariosis planis parvis, nunc aliis scariosis, aliis (pler. alternis) in aristas 1—5 rigidas margine scabras abeuntibus, nunc omnibus (pler. 5—20) in aristas mutatis. —Suffrutices *aut* herbæ *omnes ex Americâ præsertim è Mexico, rariùs ex Amer. Merid.* Folia *infer. opposita, super. opposita aut alterna, in omniâ ternato-verticillata, linearia lanceolata aut ovata, sæpius triplinervia integerrima serrata aut in unicâ trifida.* Capitula *in corymbum densum laxumve disposita, rariùs subsparsa longius pedicellata.* Cor. *albæ, roseæ aut purpureæ, interdùm subochroleucæ. De Cand.*

Specific Character and Synonym.

Stevia *trachelioides ;* caule herbaceo erecto dense pubescenti-scabrido, ramis oppositis alternisque corymbosis, foliis plerisque oppositis basi cuneatis sessilibus superioribus lanceolatis sæpe integerrimis inferioribus 4-plo majoribus late ovatis acutis trinerviis grosse serratis subtus pallidis nervis præcipue pubescentibus, involucri sub-5-flori squamis acutis corollisque hispidulis, pappo coroniformi dentato.

Stevia trachelioides. *De Cand. Prodr.* 5. *p.* 115.

Communicated by Mr. Thomas Glover, from the garden of Edward Leeds, Esq., near Manchester, who received the seeds

seeds from W. Higson, Esq., of Mexico, and who cultivates it both in the greenhouse and open border. In the latter it attains a height of three feet, and bears the dense corymbs of flowers of a very deep and rich purple colour. They are paler in the greenhouse : and some of our native specimens in the Herbarium exhibit them white.

Descr. *Stem* erect, two to three feet high, pubescenti-scabrous, tinged with purple, branched, the lower branches opposite, the upper ones alternate. *Leaves*, in like manner, opposite below, alternate above, the former broadly ovate, acute, on short, broad petioles, three-nerved ; upper ones gradually smaller and narrower, quite sessile, all of them coarsely serrated. The copious branches at the top of the stem reach nearly to the same level, thus forming a large, dense corymb, with the numerous bright red-purple flowers. *Heads* in clusters of three or four together. *Involucre* of five, erect, linear-oblong, hispid leaves, including the same number of florets. *Corolla* almost salver-shaped, the *tube* slightly enlarged upwards, the five spreading segments of the *limb* hispid on the outside. *Style*, with its very long downy branches, much protruded. *Achænium* furrowed, crowned with a short, irregular, cup-shaped pappus, destitute of awns or setæ.

Fig. 1. Head of Flowers. 2. Single Floret :—*magnified.*

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Pub by S. Curtis Glazenwood Essex Mar.ch 1.1840

HELICHRÝSUM NÍVEUM. SNOWY-FLOWERED HELICHRYSUM.

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Class and Order.

SYNGENESIA *ÆQUALIS.*

(Nat. Ord.—COMPOSITÆ. SENECIONIDEÆ.)

Generic Character.

Capitulum multiflorum, nunc homogamum, *fl.* omnibus tubulosis hermaphr. 5-dentatis, nunc heterogamum *fl. radii* uniseriatis sæpè paucissimis fæmineis gracilibus. *Invol.* imbricatum, squamis scariosis, interioribus conniventibus aut radiantibus. *Recept.* planum epaleaceum, nunc nudum, aut areolatum, nunc fimbrilliferum. *Achænia* erostria sessilia, areolâ terminali. *Pappus* uniserialis setis subscabris (nec plumosis), nunc liberis, nunc æqualiter basi subconcretis, nunc inæqualiter subcoadunatis seu ramosis.—Herbæ *aut* Suffrutices. *Species præsertim Capenses, in omni orbe veteri et Australasiâ etiam crescentes, sed nunquam in Americâ observatæ.* Folia *alterna.* Involucra *alba purpurea aut flava.* Cor. *luteæ aut purpureæ. De Cand.*

Specific Name and Character.

HELICHRYSUM *niveum;* perenne caule erecto subsimplice scabro capitulis maximis solitariis terminalibus, squamis utrinque niveis conniventibus ovatis mucronulatis, foliis oblongo-spathulatis utrinque viridibus pubescentibus basi in petiolum angustatis semiamplexicaulibus. *Graham.*

This large and extremely ornamental species, was raised by Mr. Low of Clapton, from seed sent from Swan River by Mr. DRUMMOND, late of Cork, and seedlings, sent to the garden of the Caledonian Horticultural Society in October, 1839,

1839, flowered very abundantly during July and August following, forming an exceedingly attractive border plant.

The species has proved to be perennial, pushing, in the year after flowering, many branches from the lower part of the stem. It has not ripened seed at Edinburgh. It has much affinity with the H. *macranthum* of Bentham, but is distinguished by its large capitula, pure white, cup-shaped involucre, and perennial root. It is in the highest degree worthy of cultivation. [Mrs. Wray of Cheltenham has also kindly communicated fine specimens of this plant.—Ed.]

Descr. *Stem* above three feet and a half high, somewhat woody, erect, simple below, corymbose at the top, green. *Leaves* (seven inches long, nearly two broad) gradually smaller upwards, scattered, as well as the stem, rough, without pubescence, sessile, the lower ones obovate and much attenuated at the base, the upper more nearly elliptical, green on both sides, with a strong middle rib, and four to six principal veins extending nearly to the apex of the leaf, which is entire in the edges. *Capitula* terminal, on elongated, subsimple, corymbose branches. *Involucre* large, scariose, of snowy whiteness, spreading into a hemisphere; *scales* elliptical, very numerous, imbricated, the outer and inner the smallest, concave, none of them radiating, the inner green at the base. *Florets* very numerous, yellow, cylindrical, all hermaphrodite, five-toothed. *Stamens* inserted near the base of the corolla, the apices of the anthers subexserted. *Stigmata* revolute, truncated, hairy at the apices; *style* colourless, filiform, its apex projecting above the stamens. *Germen* glabrous, crowned with a rough *pappus*, almost plumose, as long as the corolla. *Receptacle* naked, pitted. *Graham.*

Fig. 1. Floret. 2. Ripe Achænium. 3. Pappus, separated from the Achænium. 4. Portion of the Pappus to show the union of the setæ at their base:—*magnified.*

Anchúsa petiolátа. Petiolated-leaved Alkanet.

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Class and Order.

Pentandria Monogynia.

(Nat. Ord.—Boragineæ.)

Generic Character.

Calyx 5-fidus. *Corolla* hypoygna, infundibuliformis v. hypocraterimorpha, fauce fornicibus clausa, limbo quinquepartito. *Stamina* 5, corollæ tubo inserta, inclusa. *Ovarium* quadrilobum. *Stylus* simplex; *stigma* indivisum. *Nuces* distinctæ, rugosæ, basi excavata margine tumido cincta, receptaculo insertæ.—Herbæ *in hemisphæriæ borealis temperatis et calidioribus indigenæ, in regione Mediterranea imprimis copiosæ, inter tropicos Asiæ et Americæ, nec non in Capite Bonæ Spei raræ;* floribus *axillaribus solitariis v. racemosis*, racemis *bracteatis*. *Endlich.*

Specific Name and Character.

Anchusa *petiolata;* foliis lanceolatis radicalibus longe petiolatis caulinis sessilibus supremis bracteiformibus ovato-acuminatis, floribus racemoso-paniculatis, corollæ tubo calycis longitudine.

A pretty showy perennial, raised by Mr. Murray, in the Glasgow Botanic Garden, from seeds sent from Nepal by Colonel Colvin, of the department of Engineers in the service of the Hon. the East India Company. It flowered in the greenhouse in October, 1840, but will, no doubt, be found to bear the open air unharmed during the summer and autumnal months, and will prove an interesting addition to our flower borders. At first, I was disposed to cousider it the same as the Cynoglossum *longiflorum*, from Cashmere,

Cashmere, of Bentham in Royle's Illustrations, p. 305, and of Lindl. in Botanical Register for 1840, Tab. 50, but the broader leaves, the long tube of the corolla, and the projecting nectaries and stamens, beyond the mouth of the corolla of that plant, forbid such an opinion, notwithstanding the resemblance in other respects.

Descr. *Stems* herbaceous, erect, branched. *Radical leaves* five to six inches long, lanceolate, acuminate, tapering below, into a petiole, about equal in length with the blade. *Cauline leaves* gradually smaller upwards, and all of them sessile; the uppermost small, acuminated, and bracteiform. *Racemes* from the axils of the upper leaves, elongated, and thus giving a paniculated appearance to the upper part of the stem. The *peduncles* bear two or three small floral leaves, or bracteas. *Pedicels* short, at first drooping, afterwards, the corolla having fallen, erect. *Calyx* of five deep, erect, obtuse, lobes. *Corolla* with a very short tube, the limb much broader than the length of the tube, deep purple-blue, of five rounded segments, and with a dark, short ray in the centre of each. Scales of the nectary, scarcely protruded, white.

Fig. 1. Flower:—*magnified.*

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Pub.d by W. Curtis Glazenwood Essex Mar.h 1.1814

TOFIÉLDIA PÚBENS. DOWNY-STALKED AMERICAN ASPHODEL.

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Class and Order.

HEXANDRIA TRIGYNIA.

(Nat. Ord.—MELANTHACEÆ.)

Generic Character.

Involucrum caliciforme, remotiusculum, trifidum, persistens. *Perigonium* coloratum, hexaphyllum, *foliolis* sessilibus, subæqualibus, persistentibus. *Stamina* 6, perigonii foliolis basi inserta : *antheræ* versatiles. *Ovarium* triloculare. *Ovula* in loculorum angulo centrali plurima, anatropa. *Styli* 3, brevissimi, loculos terminantes ; *stigmata* capitata. *Capsula* trilocularis tripartibilis, introrsum dehiscens. *Semina* in placentis septa marginantibus plurima, cymbiformia. *Embryo* orthotropus, in basi albuminis carnosi inclusus, extremitate radiculari umbilico proxima.—Herbæ *perennes, in Europa imprimis frigidiore obviæ, sed in America Boreali copiosiores, etiam in summis Andium Peruviæ jugis observatæ ;* radice *tuberoso-fibrosa,* foliis *gramineis, plerisque radicalibus,* floribus *inconspicuis racemoso-spicatis, alternis v. oppositis, terminatisve subverticillatis. Endlich.*

Specific Character and Synonyms.

TOFIELDIA* *pubens ;* caule subnudo asperiusculo pulverulento-pubente, racemo multifloro e fasciculis subdistantibus, involucro acuto trifido, capsula vix perianthium superante.

TOFIELDIA pubens. *Dryand. in Ait. Hort. Kew. ed. 2. p. 324. Ell. Bot. v. 1. p. 424. Sm. in Linn. Trans. v. 12. p. 245. Torr. Fl. v. 1. p. 371. Spreng. Syst. Veget.*

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* So named by HUDSON, in honor of Mr. TOFIELD, an English Botanist, who resided in Yorkshire.

get. v. 2. *p.* 144. *Roem. et Schult. v.* 7. *p.* 1570. *Gray, Revis. Melanth. Am. Sept. p.* 137.

TOFIELDIA pubescens. *Pers.—Pursh, Fl. v.* 1. *p.* 246. *Nutt. Gen. Am. v.* 1. *p.* 236.

MELANTHIUM racemosum. *Walt. Car. p.* 126, *non Mich.*

NARTHECIUM pubens. *Mich. Fl. v.* 1. *p.* 209.

ANTHERICUM calyculatum. *Linn. Hort. Cliff.; Gron. Virgin. (fide Smith.)*

A North American plant, but inhabiting chiefly the southern States, as Alabama and Florida, extending as far North as the Delaware, and delighting in grassy woods and moist Pine barrens. It is, we apprehend, very rare in the botanic gardens of Europe. Our present specimens were sent from that of Edinburgh, in July, 1840. It was, nevertheless, introduced into the Royal Gardens at Kew, by Mr. WILLIAM MALCOLM, so long ago as the year 1790. Its nearest affinity is with T. *glutinosa,* a much more northern plant, of which we have lately given a figure in the "Flora Bor. Americana," tab. 191; and we had even expressed an opinion, that the two were perhaps not really distinct. An examination, however, of the living plant of T. *pubens,* has satisfied us of their specific distinction. In our present plant, there are no glutinous glands, the raceme is very long, with more distant fasicles of flowers; and the little involucre is deeply cut into three sharp segments, instead of being nearly entire, as it is in T. *glutinosa.*

DESCR. *Root* creeping, thickish, forming a *rhizoma. Leaves* mostly radical, distichous, linear, acute, striated, glabrous. *Scape* a foot to a foot and a half high, terete, glabrous below, above pubescenti-scabrous, especially among the flowers. *Raceme* terminal, four to five inches long. *Pedicels* in clusters of about three, equal in length with the flower, and subtended by small bracteas; at their summit is a monophyllous, small, scabrous *involucre,* cut into three sharp, ovate segments, and immediately receiving the base of the perianth. *Three outer sepals* shorter, and downy on the outside; three *inner,* or *petals,* narrower, quite smooth. *Stamens* as long as the perianth. *Anthers* oblong, yellow, *germen* obovate, three lobed, crowned with three spreading styles.

Fig. 1. Unexpanded Flower. 2. Ditto, fully expanded. 3. Involucre: —*magnified.*

W Fitch del.

Pub by S. Curtis Glazenwood Essex Mar. 1. 18 H

GARDÓQUIA BETONICOÍDES. BETONY-LIKE GARDOQUIA.

****

Class and Order.

DIDYNAMIA GYMNOSPERMIA.

(Nat. Ord.—LABIATÆ.)

Generic Character.

Calyx tubulosus, 13-nervius, subincurvus, ore æquali vel obliquo, dentibus brevibus rectis subæqualibus vel subbilabiatis. *Corollæ* tubus longe exsertus, rectus vel incurvus, intus nudus; *limbus* bilabiatus, *labium superius* erectum subplanum emarginatum, *inferius* subpatens, lobis planis medio latiore. *Stamina* 4, subdidynama, inferioribus longioribus, laxe adscendentia, apice subdistantia, superiora subinde sterilia. *Filamenta* edentata. *Antheræ* biloculares, loculis distinctis parallelis vel subdivergentibus. *Styli* lobi subæquales. *Achænia* sicca, lævia.—Suffrutices fruticesve *ramosissimi foliosi, sæpe procumbentes.* Flores *pulchri, sæpius coccinei.* Genus *a* Micromeria *non nisi longitudine corollarum, limbique lobis suberectis, distinctum. Benth.*

Specific Character and Synonyms.

GARDOQUIA *betonicoides;* radice repente, caule erecto, corollis calyce subglabro triplo longioribus, foliis ovato-cordatis grosse crenatis utrinque subglabris subtus purpurascentibus, cymis pedunculatis erectis, floribus congestis. *Graham.*

GARDOQUIA betonicoides. *Lindl. Bot. Reg. in Misc. n.* 159.

The plant was received at the gardens of the Caledonian Horticultural Society, from Mr. Low, of Clapton, in October, 1839, and flowered freely during the summer and autumn following, both in the greenhouse and open border, requiring no particular treatment.

DESCR.

Descr. *Root* creeping. *Stem* (in the specimen described nearly three feet high). *Leaves* (an inch and a half to two and a half inches long, one and a quarter to one and three quarters broad) ovato-cordate, blunt, deeply crenate, glandular and subglabrous on both sides, at first green on both sides, soon becoming purplish below; middle rib and distantly reticulated veins prominent below, channelled above; *petiole* nearly as long as the leaf, channelled above. *Bracts* resembling much diminished, subsessile, subentire leaves; *bracteoles* linear, subulate. *Cymes* erect, distant at the lower part of the terminal pseudo-spikes, approaching higher up, with many crowded, erect *flowers*. *Calyces* densely adpressed, subglabrous, subequal. *Corolla* (an inch long) agreeably perfumed, somewhat spreading, thrice as long as the calyx; *tube* clavate, compressed laterally, grooved and veined, shortly glanduloso-pubescent, *limb* oblique, five-cleft, the lowest lobe the largest, crenate, and revolute, the others subequal, the two uppermost the flattest. *Stamens* didynamous; *filaments* adhering to the tube of the corolla to unequal heights, the two inner the farthest exserted, the others nearly as long as the upper lobes of the corolla; *anthers* dark, *lobes* parallel, *pollen* white. *Pistil* rather longer than the shorter stamens; *style* glabrous, and colourless, except at the apex, where it has a faint tinge, the same as the corolla, its *lobes* subulate, spreading, subequal. *Disk* small, round, fleshy, supporting the abortive achænia. *Graham.*

Fig. 1. Flower. 2. Corolla, laid open. 3. Ovary :—*magnified.*

W Herbert del.

Pub by S. Curtis Glazenwood Essex 1st Nov.r 1841.

Crocus speciosus. Showy Crocus.

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Class and Order.

Triandria Monogynia.

(Nat. Ord.—Iridaceæ.)

Generic Character.

Scapus latens 1- raro 2-florus ; *tubus* cylindricus fauce ampliatâ, *limbus* regularis, filamenta ori vel infra faucem tubi inserta, *antheræ* erectæ, *stylus* gracilis.

Specific Character and Synonyms.

Crocus *speciosus ;* autumnalis, tunicis membranaceis tenuibus, lineis raris parallelis superne confluentibus, vaginacearum basi persistente lacerè disruptâ, foliaceâ exteriore infra medium cormum affixâ, scapo nudo, spathâ occultâ tubatâ bracteâ æquali non tubatâ tubum amplexâ, tubi parte exsertâ nudâ elongatâ fauce suprastamineâ pilis albis minutis hispidâ, sepalis cæruleo-purpureis lineis tribus et basi saturatioribus, petalis pallidioribus conspicuè venosis, filamentis circ. $\frac{1}{4}$-unc. infra faucem insertis circ. $\frac{3}{16}$-unc. liberis, stigmatibus multifidis, foliorum canaliculis non fortiter nervatis costâ dorsali deflexè et densè ciliatâ multùm latioribus, seminibus subangulatis obscurè subpurpureo-rufo-brunneis.

Var. 1. *Caucasicus,* fig. 1. C. speciosus, *M. von Bieb.* non *Wilson,* neque *Reichenbach ;* cormo minore, gemmâ-floriferâ (in indigenis) unicâ uniflorâ (neque adhuc in cultis bifloram vidi), vaginâ extrafoliaceâ internæ proximâ apice integrâ, bracteâ tubum sinistrorsum imbricante prorsus involvente, germine albo, tubo tenuiore summâ parte vix purpurâ punctato fauce albâ, *limbo* minore pallidiore laciniis acutioribus, filamentis albis, stigmatibus patulo-multifidis dilutè aurantiacis laciniolis capillaribus apice crassiusculis antheras superantibus.

bus. Variat flore maximo niveo stigmatibus saturatè aurantiacis pluries et profundiùs fissis. Variat fig. 1 etiam flore cæruleo-purpureo stigmatibus tenuioribus paucifidis, E Caucaso.—fig. 1†, corm. nudat. Variat fig. 1* stylo parvulo ex prov. Karabagh prope mare Casp. Herb. Hooker.

Var. 2. *Transylvanicus*, fig. 2; (C. speciosus, *Bot. Reg.* 25. 40. *icone pro cærulescente perperam rubescente*) cormo e majoribus (in cultis plurigemmato gemmis sæpius bifloris) vaginâ internæ proximâ apice erosâ, bracteâ tubum marginibus non approximatis dimidio plùs amplexâ, germine flavescente, perianthio majore saturatè basin versùs purpurâ-punctato, fauce flavescente, limbo obtusiore saturatiore, filamentis pallidè flavescentibus subulatis, stigmatibus fasciculato-multifidis laciniolis superne sensim crassioribus.—*Habitat in Transylvaniâ, unde Angliam advectus colitur. Specim. ex Transylv. in Herb. Lindl. est.*

Var. 3. *Laxior*; cormo modico gemmâ 1—2-florâ, bracteâ tubum involvente, tubo confertiùs et saturatiùs purpurâ-punctato limbo maximo, stigmatibus laxiùs effusis. Prostat venalis apud hortulanos Young et Pamplin.—*Habitat ? Tauriam vel Caucasum ? W. H.*

The Genus Crocus extends between the Caspian and the Atlantic, as far North as 49° in S. Podolia, but I am informed that it does not cross the upper portion of the Danube in 48°. I have not been able to learn what changes of soil or elevation arrest its progress northwards from Odessa and S. Podolia, and confine it to a much lower latitude in France; probably the want of drainage and of a dry subsoil; for it usually affects high situations. Southward it reaches 35°, or thereabouts, in the line of Tangiers, Malta, Crete, Cyprus, and Syria near Aleppo. I find no trace of it further South, and I cannot conjecture Mr. Ker's reason for naming C. *reticulatus* of the Danube and Caucasus, C. *Susianus*, Susa being near lat. 32, almost three degrees below the situations in which Crocus has been yet found. The Russians have not met with it East of the Caspian or Volga. Desfontaines described erroneously a Crocus *vernus*, yellow, purple, and white, in its varieties, as found on the ridge of Atlas, which will be within 35°; but his descriptions were taken from Parisian garden specimens, and I learn, that the only specimen in his Herbarium, which has the appearance

ance of having been gathered wild, though much damaged, seems more like C. *versicolor;* but no Crocus has been discovered in the French expeditions from Algiers. The beautiful autumnal Crocus here represented belongs to the division with a naked scape, wanting the involucre; and none such have been found West of Italy. REICHENBACH's C. *speciosus* is C. *Byzantinus* PARKINSON and KER, *Bannaticus* of GAY. WILSON's (Eng. Bot.) is C. *Pyrenæus,* PARKINSON, *(nudiflorus* of SMITH, and *multifidus* of RAMON,*)* a very different plant, with an involucrate spathe and stoloniferous bulbs. The first variety, kindly sent to me by Mons. GAY, is from Caucasus and the hills near Tifflis; the white subvariety is a dry specimen from Caucasus. The second, more conspicuous, from Transylvania, may be obtained from Mr. OSBORNE's Nursery at Fulham. The third is cultivated at Mr. YOUNG's Nursery, at Milford, near Godalmin, and at Mr. PAMPLIN's, Lavender Hill, near Battersea. It is probably from Tauria, or Caucasus, unless it be the C. *speciosus* said to be found on Mount Athos. The seeds of C. *speciosus* are of a deep purplish rust colour, larger than those of C. *longiflorus,* which approach them in colour. *W. H.*

CROCORUM SYNOPSIS.

IRIDACEÆ. Exspadiceæ, corolliformes, agynandræ, hexapetaloideæ, epigynæ, triandræ. IRIDEÆ. Stamina sepalina.

CROCUS. CORMUS annuus tunicarum vaginacearum et foliacearum basibus circumnotatus, *folia* sublinearia dorso bicanaliculato costato, *scapi* 1—5 involucrati vel involucro obsoleto nudi, trigoni unirarò bi-flori vaginis inclusi, *spatha* tubata vel tubum amplexa intus bracteata vel bracteâ obsoletâ ebracteata, *germen* subcylindrico-subovale, *tubus* cylindricus fauce ampliatâ, ***limbus*** **regularis,** ***filamenta*** **ori** ipsi vel infra faucem tubi inserta, *antheræ* **connectivo subdorsali super**ne minore erectæ sagittatæ loculis a vertice sublateraliter scissis, *stylus* gracilis superne trilobus (lusu interdum 2—4-lobus) stigmatibus sensim dilatatis, truncatis, vel fimbriato-plicatis, vel pauci- multi-fidis, *capsula* chartacea oblonga trigona apiculata trivalvis trilocularis reflexè dehiscens, ***semina*** **raphe rugosâ subsphærica** testâ durâ colore brunneo pallescente vel rufescente vel purpurascente. OBS. *Tunicæ vaginaceæ subtruncatæ vaginarum* 3—9 *extrafoliacearum, foliaceæ sæpe longè apiculatæ foliorum sub*-12, *bases sunt inflato-tubatæ; foliaceæ persistunt et sæpius vaginacea interior, exteriores sæpe depereunt; zona radicalis (i. e. fibras radicales emittens) unica est inter tunicas vaginaceas sita;*

sita ; gemmæ cormiferæ ex zonis omnibus oriri queunt, vel anno præcedente inter bases foliorum recentiorum sub lente videndæ ; gemmæ nascentis vaginæ extrafoliaceæ cormo futuro fundum versùs, folia gradatim altiùs, diversis in diversis speciebus spatiis, basi inflato-tubatâ inseruntur. Fibra radicalis crassa enormis e fundo cormi nascentis interdum, uti in gladiolo, enata incrementum inusitatum portendit. Crocorum cormis annuis auctorum seriùs ociùs generationis obsolescit facultas. Habitant intra mare Caspium et Atlanticum gradusque, quoad novimus, latitudinis terrestris 35 *et* 49. *W. H.*

§. 1. Nudi; *i. e., scapi involucro obsoleto. (Vidi interdum in nudis involucri obsoleti rudimentum.)*

§§. 1. Membranacei ; cormi tunicâ præcipuâ membranaceâ.

1. *Annulatus ; Herbert* (vel, si mavis. §. Annulati. 1. *Biflorus.* 2. *Pusillus.* 3. *Adamicus.* 4. *Chrysanthus.*). Flore verno ; tunicarum vaginacearum basi annulatâ tantùm persistente, foliaceâ exteriore durâ infra medium cormum affixâ, spathâ bracteâ tubatâ. Observ. Foliorum marginibus reflexis costâ dorsali canaliculis angustiore, spathæ bracteâ cylindraceè involutâ (non cylindricâ), perianthii fauce luteâ, filamentis sub lente subpubescentibus, stigmatibus indivisis subtruncatis odoratis, seminibus pallescentibus sphæricis raphe et chalazâ conspicuis.

A ; foliorum et costæ dorsalis margine ciliato, canaliculis dorsalibus binervibus, filamentis et fauce pubescentibus.

Var. 1. *Adamicus ;* C. Adami, *Gay, Bull. Fer.* 25. *p.* 219. 1831. Vaginis pallidis, limbo pallidè cæruleo-violaceo, sepalis extus saturatè 5—7-plumeo-striatis, pube tenui hinc inde ad basim petalorum, filamentis sub lente minutissimè pubescentibus $\frac{1}{9}$-unc. infra limbum tubo insertis, stigmatibus integris plicatis truncatis subtiliter fimbriatis pallidè aurantiacis antheras (filamentis duplo longiores) superantibus. *Habitat, teste Gay, in Tauriâ et Iberiâ.*

Var. 2. *Biflorus ; Miller.* Vaginis lutescentibus, limbo subalbido sepalis extus stramineis 5-striatis, foliorum margine crasso recurvo, scapo interdum (vidi ipse) bifloro.

Subvar 1. *Princeps. Supra* 845 *; passim in hortis. Sp.* 5-*striatum orientale, Pallas Herb. Lambert. Sp.* 5-*striatum ex summis Cypri et Cretæ jugis, Sibthorp. Oxon. perperam* C. vernus, β, *Smith, Prodr. Flor. Græc.*

Subvar. 2. *Stigmatosus ; Sabine.* Limbo subpurpurascente mox albescente, stylo elongato.

B ; foliis lævibus, canaliculis dorsalibus enervibus, filamentis vix sub lente pubescentibus.

Var. 3. *Pusillus ; Tenore.* Vaginis albescentibus, foliorum canaliculis vix nervatis, ciliis et pube ferè obsoletis, styli lobis antheras superantibus.

Subvar. 1. *Tenorianus ;* minimus limbo albo sepalis extus stramineis 3-striatis petala superantibus. *S. Rocco prope Neapolim.*

Subvar. 2. *argenteus ;* C. minimus *perperam supra* 2994, *fig. pessimè coloratâ.* C. argenteus, *Sabine Hort. Soc. T.* 7. 431, major limbo subpurpurascente

Vide infra ad calcem 3862.

W Herbert del.

Pub by S Curtis Glazenwood Essex April 1 1841.

HERBERTIA PULCHELLA, ET CÆRULEA. PRETTY, AND BLUE, HERBERTIA.

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Class and Order.

HEXANDRIA MONOGYNIA.

(Nat. Ord.—IRIDACEÆ.)

Generic Character.

Perianthium rectum basi annulatum sepalorum laminis magnis patentibus, petalis parvulis cymbiformibus, filamenta monadelpha, antheræ in cylindro sessiles subulatæ styli lobis inter stigmatum lobos agglutinatæ, stylus rectus gracilis lobis divaricantibus, stigmata lobis binis divaricantibus, capsula oblonga operculo brevi dehiscens, semina parva angulata badia; folia plicata, bulbus ovatus.

Specific Character and Synonyms.

HERBERTIA *pulchella;* (fig. 1, 2. *a. b. c.*) *foliis* 5-uncialibus vel ultra, *scapo* floribus pedunculatis successivis bracteato, *perianthii* sepalis undulatis lilacinis ungue pallidè lutescente vel albicante lilacino-punctato, petalis lilacinis medio saturatioribus, *antheris* subulatis stigmata superantibus. 1. var. ungue albicante. 2. var. ungue lutescente. *a.* petalum. *b.* sepalum. *c.* germen cum genitalibus.

HERBERTIA pulchella. *Sweet Br. Fl. Gard.* 222.

HERBERTIA *cærulea,* (fig. 3. *d. e. f.*) *pedunculi* bracteis brevioribus, *sepalorum* unguibus albis cæruleo-punctatis laminis cæruleis maculâ ad basin saturatâ triangulari, *petalis* acutis cæruleis medio saturatioribus, *antheris* et *stigmatibus* brevibus, *a.* styli lobus cum stigmate bilobo. *e.* idem cum antherâ. *f.* anthera.

TRIFURCIA cærulea. *Herbert, supra* 3779, *p.* 3.

HERBERTIA pulchella? *Lod. Bot. Cab.*—*W. H.*

Fig. 1 and 2 represent two varieties of HERBERTIA *pulchella*, *a.* the petal, *b.* the sepal, *c.* the germen, style, and stamina.

stamina. The figure in the "British Flower Garden" of SWEET, by whom it was named, is so indifferent, and the description of the stigmas so inaccurate, that H. *cærulea* was supposed to be generically distinct, and HERBERTIA to have laminaformed stigmas, till an opportunity presented itself at Spofforth of examining H. *pulchella*. *Pulchella* was found in the neighbourhood of Buenos Ayres; *cærulea* was sent by DRUMMOND from Texas. The plant figured in the "Botanical Cabinet" as HERBERTIA *pulchella* is evidently not that plant. The Genus TRIFURCIA merges in HERBERTIA. *W. H.*

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subpurpurascente (variat pallidiore) sepali sextus stram. 3-stri. petala superantibus.—*Pisa; variat aliquantulum in solo Romano. Specim. ex Caucaso, Prescott, Herb. Hooker.*

Subvar. 3. *Cærulescens;* perianthio aliquantulum majore petalis subcærulescentibus. *Ossolone in ditione Neapolitanâ.*

Subvar. 4. *Lineatus; Jan.* (C. biflorus, *Parkinsoni*, perperam, *Sabine*). Major limbo albo sepalis 3-striatis. *Prope Parmam; ipse non vidi.*

Subvar. 5. *Estriatus; Herbert.* Biflorus, *Bot. Reg.* 1987. Limbo purpureo petalis sepala extus straminea non striata superantibus, bracteâ tenuiore loratâ. *Prope Florentiam.—Specim. prope Tiflim, lect. Herb. Hooker. Spec. orientale, Pallas. Herb. Lambert.*

Subvar. 6. *Albidus; Herbert.* Foliis angustis, limbo albo (ni fallor in siccis) non striato, sepalis petala obtusiora, styli lobis antheras, superantibus. *Specim. Pallas Herb. Lambert.—Sp. ex Tauriâ Herb. Hooker,—Sp. ex Sylvis Bononiensibus? ib.*

C. perianthio aureo; cormi tunicis foliaceis duris circumscissis superne cuspidatis.

Var. 4. *Chrysanthus; Herbert;* ex sicco (nisi sp. per se C. *chrysanthus*) minimus, foliis angustis, spathâ et bracteâ tubum aureum amplexis æquantibus, limbo circ. $\frac{3}{4}$-unc. aureo, petalis obtusioribus sepala, styli lobis antheras, superantibus. *Prope Byzantium sub nomine* C. aurei *legit Fridvalsky, Herb. Hooker, foliorum margine, canaliculis, et basi, ignotis.*

2. *Speciosus.* Flore autumnali. Vide supra 3861.

3. *Pulchellus; Herbert; ex sicco* (nisi sit C. *speciosus, pulchellus*, var). Flore autumnali, cormo minimo unigeminato unifloro, tunicis membranaceis basi ferè circumscissis, spathâ inclusâ, bracteâ (ni fallor) tubatâ spatham vix æquante, tubo gracili parte exsertâ elongatâ nudâ 2 unc. circ. vaginas superante, limbo unciali (in sicco purpureo concolore) fauce saturatè luteâ, stigmatibus inæqualibus superne furcatis apice exasperatè fisso, foliis hysteranthiis ignotis. *Spec. parvulum autumn. prope Byzantium a Mont-Bret lectum Herb. Hooker. Vivum non vidi.*

4. *Sibthorpianus.*

Vide infra ad calcem 3863.

W Hobart del.

Pub by S Curtis Glaxerwood E.s.sex Apr.1 1841

Bomarea Simplex. Simple Bomarea.

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Class and Order.

Hexandria Monogynia.

(Nat. Ord.—Amaryllidaceæ. Subord. Hypoxideæ. §. Alstrœmiformes.)

Generic Character.

Caulis umbellatus tortus, *sepala* petalis diversa, *filamenta* petalina præstantiora, *capsula* obtusè trigona superne dehiscens.

Specific Character and Synonyms.

Bomarea *simplex ; foliis* acutè subcordatis subtùs tomentosis, *pedunculis* sub-5 infra medium minutè bracteis sæpius simplicibus munitis, *obvolucri* foliolis plerumque parvulis, *germinis* operculo canescente pubescente, *perianthio* subæquali unciali, sepalis rubris, petalis viridi-luteis rubro-punctatis.
Var. 1. *Herb. Amaryll.* 15. *f.* 5. *p.* 119.
Var. 2. *Furcatâ,* pedunculis bifloris.
Var. 3. *Acuminata,* petalis acuminatiùs productis. *W. H.*

Seeds of three varieties of this plant were brought by Mr. Pentland from different situations near Cusco, which have all flowered in the open ground at Spofforth, in front of the greenhouses. Two of them are here represented. The third had simple peduncles, with the petals longer and more pointed. It was observed, Herb. Am. p. 119, that the bracts on the peduncles seemed to indicate a disposition to form a secondary one, and accordingly one of these varieties departs from the simple type. The species is very hardy, and appears to extend widely on the Andes, with much variability. The white down on the opercle of the germen is remarkable. I find my Sphærine *brevis* amongst Mr. Matthews's drawings, which enables me to add to its description,

description, Perianthium rubro-coccineum cornu viridi. Another of his drawings represents Bomarea *dispar*, which enables me to add to its description, Sepala rubro-purpurea, petala viridia margine punctato, antheræ lilacinæ, caulis subpurpurascens. *W. H.*

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4. *Sibthorpianus.* Flore verno? (nisi sit reverâ var. C. *Tournefortii* autumnalis, *Gay*). Cormi tunicis tenuiter membranaceis nitidis demum inferne lacerè circumscissis, scapis 1—2 vaginâ interiore unciam circiter brevioribus, spathâ lati-bracteatâ tubum subæquante, limbo (albo et purpureo?) fauce lævi (lutescente?) stylo trifido tenui antheras vix aut non æquante. "C. vernus, *γ*, *orientalis flore subcæruleo seu violaceo externe spadiceo rubente. Tourn. Cor.* 25." *Smith, Prod. perperam* C. vernus. *Specimina ex summis Cretæ et Cypri jugis, Sibthorp. Oxon. Cormum integrum non vidi.*

Var. 1. *latifolius;* foliis medio latioribus.

Var. 2. *angustifolius;* foliis angustioribus linearibus; limbo minore?

5. *Tournefortianus; Gay, Bull. Ferus.* 25. 220. "Flore autumnali tunicis tenuissimis basi demum in fibras capillares liberas solutis foliaceis continuis lævissimis e superiore hemisphærio ortis, bracteâ dimidiatâ (*i. e.* loratâ) stigmatibus profundè multifidis lævibus; flores cærulescentes violacei striati; autumnalis. Habitat in Cycladibus insulis." *Gay ex sicco citat. Certè Sibthorpiano affinis.*

§§. 2. Squammati; tunicâ squammatâ.

6. *Lævigatus; Bory, V. du Mor. cum icone. Spec. Sibth. Oxon. Perperam* C. vernus, *Smith.* Flore verno; cormi tunicis duris lævibus enervibus infra squamæformiter laceris, scapis 4, germine fere exserto, spathâ bracteâque erosis tubum circiter uncialem superne luteum subæquantibus, fauce perianthii lævi saturatè aurantiacâ, stylo tenui filamenta subæquante petalis subalbidis sepalis purpurâ trilineatis, foliis angustis lineâ albâ. *In Erymantho nive fusâ statim exortus. Sp. Sibthorp. ex Cretâ aut Cypro certè est* Lævigati *var.*

§§. 3. Parallelo-fibrosi; tunicarum fibris parallelis.

7. *Boryanus;* flore autumnali, germine vaginas subæquante, foliis angustis, spathâ bracteâque æqualibus acutis, perianthii tubo et fauce luteis, limbo lacteo, stigmatibus exasperatis antheras superantibus.

Var. 1. *Cephalonensis;* C. Boryi, *Gay, Bull. Ferus.* 25. 220. *Bory, V. du Mor. cum icone.* Tunicis foliaceis lævissimis petiolis (*i. e.* basi) liberis exteriore infra med. affixâ in fibras complanatas demum solutis, bracteâ loratâ, stigmatibus profundè multifidis exasperatis; flores lactei autumnales. *In Peloponeso et Cephaloniâ, Gay; prope Modon et Navarino, Bory; in monte Nero Cephaloniæ, unio iter. Octobr.*

Var. 2. *Caspius.* C. Caspius; *Fischer MSS. Lenxovan. Herb. Hook.;* tubo longiore vix diversus.

8. *Lagenæflorus.*

Vide infra ad calcem 3864.

W. Herbert del.

Pub by S. Curtis Glazenwood Essex 1 Apr.l 1841.

Crocus Suaveolens. Sweet-scented Crocus.

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Class and Order.

Triandria Monogynia.

(Nat. Ord.—Iridaceæ.)

Generic Character.—Vide supra Num. 3861.

Specific Character and Synonym.

Crocus *suaveolens;* vernus *cormi tunicâ* vaginaceâ interiore prope basim affixâ fibris parallelis superne reticulatè confluentibus, foliaceâ exteriore supra medium cormum affixâ pallidiore inciso-notatâ, *involucro* bifloro spathâ breviore tubato apiculato, *spathâ* tubatâ acutâ ebracteatâ hyalinâ, *tubo* albicante ad faucem aurantio-maculatâ, *limbo* purpureo fauce saturatè aurantiaco-maculatâ sepalis extus stramineis 3-striatis, petalis ad basim 5-striatis, *stigmatibus* truncatis odoratis antheras prorsus superantibus, antheras filamenta duplo superantibus, *foliis* lævibus canaliculatis enervibus costâ dorsali latioribus, *capsulâ* (an semper ?) estriatâ. —*Habitat in Campagna di Roma et Valle d'Inferno Romam prope, Itri Neapolitano, et in collibus calcareis Fundos juxta.*

Crocus suaveolens. *Bertoloni. W. H.*

This very pretty and sweet-scented Italian Crocus is sufficiently hardy to bear our climate. Some bulbs of it were brought to England by the Hon. William Strangways, and others have been sent to Spofforth from Naples by Professor Tenore. It varies a little in the streaks on the sepals and size and shape of the segments. It is distinguished from C. *Imperatonius,* by the decided reticulation of the upper part of the inner vaginaceous coat, by the unvarying

unvarying absence of the conspicuous bracte within the spathe, which seems constant in the latter, and the absence of purple stripes on the immature capsule, and the stigmas are small and truncate, exceeding their anthers by their whole length, whereas those of *Imperatonius* are usually more ragged, and scarcely exceeding them. The inner vaginaceous coat is reticulated upwards, parallel-fibred below and attached near the base, the outer foliaceous coat attached on the brow above the middle of the corm, as it is in C. *Imperatonius*. *W. H.*

Fig. 1. The neck of the Bulb, the two-flowered Involucre, and one of the Spathes cut open, showing the Germen and Tube. 2. Outside of a Sepal. 3. Inside of a Petal. 4. Style and Stamens.

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8. *Lagenæflorus*. *Nobis* 3869. Flore verno.
9. *Campestris ; Pallas MSS. Herb. Lambert*,—" Serotinus?" *perperam Ker in Synon. Bot. Mag.* 1267. C. hybernus, *Fridwalski, MSS. in herbariis ; in Roumeliâ lectus.* Flore autumnali, sero ; cormo modico unigemmato 1- rariùs 2-floro, tunicâ vaginaceâ interiore confertè subparallelo-fibrosâ prope basim affixâ ; foliaceis fibris tenuiter reticulatis superne setosis exteriore infra med. proximâ paullò supra affixâ, scapo brevi ($\frac{1}{4}$-unc.), spathâ bracteatâ, bracteâ (ni fallor) tubatâ (certè tubum amplexâ), tubo vaginas extrafoliaceas unc. plùs minùs superante, limbo pallidè (in sicco) griseo-violaceo, interdum albo, sepalis petala longitudine et latitudine superantibus, stigmatibus simplicibus sensim majoribus truncatis antheras paullò superantibus, foliis 6—10 angustis hysteranthiis vere excrescentibus rariùs apice synanthio. *Hab. Tauriam et Roumeliam. Vivum non vidi.*

§§. 4. Reticulati ; tunicâ præcipuâ reticulatâ.

10. *Cancellatus ; Herbert.* Flore autumnali vel æstivo ; cormo unigemmato 1—2-floro tunicis latè reticulatis demum cribrosis, foliaceis superne setosis, scapo (ni fallor in sicco) nudo, spathâ (ni fallor) bracteatâ bracteâ tubatâ, tubo superne nudo flavescente, limbo purpureo ad basim extus saturatiùs strictâ, stigmatibus inæqualibus subsimplicibus antheras subæquantibus saturatè aurantiacis.

Var. 1. *Kotschianus ;* minor limbo circ. $1\frac{1}{4}$-unc. *In Syriâ legit æstate Th. Kotschy, Herb. Bentham ; in Tauriâ, Herb. Hooker.*

Var. 2. *Naupliensis ;* major limbo circ. $1\frac{3}{4}$-unc. *Spec. Octobri prope Naupliam lect. perperam* C. nudiflorus, *Herb. Bentham. Vivos non vidi.*

11. *Reticulatus ;*

Vide infra ad calcem 3865.

W. Herbert del.

Pub.by S. Curtis Blackwood Essex 4pr. 1830.

COBURGIA COCCINEA. SCARLET COBURGIA.

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Class and Order.

TYIANDRIA MONOGYNIA.

(Nat. Ord.—AMARYLLIDACEÆ. Subord. AMARYLLIDEÆ. §. PANCRATIFORMES.)

Generic Character.

Tubus ampliato-cylindricus plùs minùs curvatus, *limbus* brevis regularis semipatens, *corona* subcylindrica dentibus interstamineis, *filamenta* vix conniventi, *antheræ* rectæ, *stylus* gracilis, *stigma* obtusum.

Specific Character.

COBURGIA *coccinea;* bulbo bulbulifero depressè rotundo, scapo circ. 4-floro glauco subterete foliorum saturatè viridium nitentium obtusorum semunciam latorum præcursore, spathâ vix unciali viridi marcescente, pedunculis inæqualibus subsesquiuncialibus, perianthio lætè coccineo, tubo $1\frac{1}{4}$-unc. basi tenui curvè præcipitato pendulo superne ultra $\frac{3}{8}$-unc. lato, coronâ $\frac{1}{6}$-unc. dentibus bilobis acutis, limbo circ. $\frac{3}{8}$-unc. subovalibus, filamentis brevibus, antheris luteis limbum æquantibus stylo $\frac{1}{6}$-unc. brevioribus, stigmate dilatato simplici pallido.—*Habitat Andes Peruviæ prope Caxamarquillam. Hujus generis est fortasse Carpodetes recurvata* (P. *recurvatum,* Ruiz) *tubi parte sub limbi specie perperam depictâ. W. H.*

This beautiful plant was discovered by JOHN MACLEAN Esq., of Lima, in one of his excursions over the Cordillera, and two bulbs dug up by him were kindly sent to Spofforth. They were potted in rich alluvial soil, with a little rotten manure, and throve well, standing out all the summer and autumn of 1839, the season being unusually wet and cold, but appeared to dislike sunshine and fine weather. At the approach

approach of winter the leaves perished, when the pots were set dry in the greenhouse. Early in the spring both the bulbs flowered, the spathe having appeared while the bulbs were dry. One of them flowered again at the end of October, very shortly after the pot had been set dry. The plant has considerable affinity in the form of its flower, and the abrupt curvature of the tube, to CARPODETES *recurvata*, but the enlarged part of the flower of that plant is supposed to be a portion of the limb. It is, however, very probable that it will be found to conform with this plant, in which case it will form a section with this plant, if not a separate Genus. There is a race of plants, of which Mr. MACLEAN sent bulbs and dry specimens to Spofforth in 1840, which appear to form a link between COBURGIA and CLINANTHUS. By Mr. MATTHEWS's drawings it appears that the tube of C. *variegata* is little curved or attenuated, and more erect than usual in this Genus, while that of C. *incarnata* is very slender in the lower part, and exceedingly curved downwards, approaching nearer to the form of *coccinea* than *fulva*, *variegata*, and *trichroma*, and the germen of *variegata* is somewhat triangular. Mr. MACLEAN has sent specimens of another remarkable COBURGIA. COBURGIA *acuta*, HERBERT; foliis sensim attenuatis, umbellâ decemflorâ spathâ $2\frac{1}{2}$-unciali valvis $\frac{3}{4}$-latis, pedunculis brevibus, perianthio triunciali fulvo, filamentis semunciam stylo brevioribus coronâ longioribus, stylo limbum vix uncialem superante, limbi foliolis angustis acutis, coronæ dentibus, ni fallor in sicco, indivisis. Mr. MACLEAN has sent to Spofforth two bulbs, which have flowered, of a species of EUSTEPHIA, with long leaves, erect, with the upper part hanging down to the ground, EUSTEPHIA *Macleanica*, HERBERT. The singular construction of the filaments and the asserted pits under them had thrown discredit on the Genus. There are no pits in this, but the filaments are winged, and the wings terminate in long setiform teeth. *W. H.*

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11. *Reticulatus ; M. v. Bieb. Perperam Susianus, supra* 652. Flore verno ; cormi tunicâ vaginaceâ interiore depereunte, foliaceis reticulatis exteriore cribrosâ prope basim affixâ, basi inferne apiculatè circumscissâ, proximâ supra medium, cæteris gradatim altiùs, foliis costâ dorsali ciliatâ canaliculis angustis latiore marginibus crassis reflexis, scapo elongato, spatham bracteâ tubatâ sub æquante, limbi fauce lævi, filamentis dorso non canaliculatis lævibus ori ipsi insertis stigmatibus conduplicatis inæqualibus integris.

Var. 1.

Vide infra ad calcem 3866.

a
b
a
b

Callithauma viridiflorum, et angustifolium. Green-flowered, and Narrow-leaved, Callithauma.

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Class and Order.

(Hexandria Monogynia.)

(Nat. Ord.—Amaryllidaceæ. Subord. Amaryllideæ. §. Pancratiformes.)

Generic Character.

Tubus gracilis ampliato-cylindricus subhorizontalis. *Corona* subinfundibuliformis, *limbus* minimè patens, *filamenta* brevia conniventia coronæ lateribus inserta. *Stigma obtusum. Plantæ bulbo subcylindrico, foliis linearibus. Hab. Andes. Genus Coburgiæ affine.*

Specific Character and Synonyms.

Callithauma *viridiflorum;* (fig. a.) bulbo sexunciali cylindrico foliis circ. $\frac{3}{4}$-latis viridibus subplanis scapo viridi ancipite, spathâ marcescente deciduâ, pedunculis brevibus vix æqualibus, germine oblongo trigono circ. $\frac{3}{4}$-unc. tubo $1\frac{3}{4}$—$\frac{1}{8}$-unc. superne $\frac{1}{4}$-unc. lato pallidè viridi, limbo viridi subunciali, coronâ æquali pallidiore margine 12-lobo, filamentis regioni coronæ superiori insertis conniventibus inclusis, antheris luteis versatilibus, stylo coronâ breviore stigmate obtuso.

Callithauma viridiflorum. *Herb. Amaryll.* Pancratium viridiflorum. *Ruiz, Flora Peruv.*

Callithauma *angustifolium;* (fig. b.) foliis dimidio angustioribus, limbo coronam $\frac{1}{4}$-unc. excedente, stylo perianthium excedente stigmate trilobè dilatato.

Habitant in Palcæ Peruvianæ versuris, et secundum Ruiz et Pav. in Huassahuassi nemoribus. *W. H.*

This bulb, which is stated in the "Flora Peruviana" to have large and beautiful emerald-green flowers on a stalk as

as tall as a man, has excited much curiosity, no specimen of it having been brought to Europe. Mr. Maclean in one of his interesting excursions undertook to seek for it on the headlands of the ploughed land in Palca, where he discovered it, having a stem scarcely three feet high and a triangular capsule, the bulb answering the description of Ruiz, but the natives denied its ever growing taller. The bulb sent to Spofforth showed blossom immediately, but having very little fibre, the scape did not grow above a foot high. It is very possible, that in the moist woods of Peru, it may reach a greater size than on the stony headlands. The second species has a smaller bulb of the same form, much narrower leaves, a shorter tube, limb exceeding the cup, and style exceeding the limb, with a three-cornered dilated stigma, which is almost lobed. It was found in the same neighbourhood, I believe nearer to Vitoc, which is on the bounds of Peruvian civilization. Callithauma is closely akin to Coburgia, of which it may perhaps ultimately be found to form a section. Its filaments are inserted into the side of the cup and dip into it. *W. H.*

Var. 1. *Reflexus ; perperam Susianus Ker, Bot. Mag.* 652. ; C. fulvus; *Pallas MSS. Herb. Lamb.* Limbo aureo sepalis revolutis extus fusco-purpureo-striatis vel suffusis. *Odessa, Caucasus.*

Var. 2. *Rectilimbus ;* similis præcedenti sepalis non revolutis ; sed sepalis depressis, petalis erectioribus. *In hortis.*

Var. 3. *Immaculatus ;* flore aureo estriato ; C. fulvus, *Pallas ap. Herb. Lamb.—Spec. Herb. Hooker ex Byzantio ; Lady Liston.*

Var. 4. *Variegatus ; Hornsch et Hoppe ;* foliis patentibus, scapo elongato, germine subalbido, limbo pallidè purpurascente, sepalis extus striatis, tubo saturatè 6-lineato. *Istria, Sylva Lipiza dicta, Podolia Australis, Odessa, Caucasus ; Corcyra in collibus Cotonychii teste pr. Tipaldo.*

12. *Gargaricus ; Herbert. Specim. Crips et Yalden ex monte Gargaro. Herb. Banks et Bentham.—Dr. Clark, Herb. Lambert.* Flore verno, tunicâ vaginaceâ interiore fibris superne cribrosè reticulatis inferne parallelis basi non circumscissâ, spathâ (nescio an bracteatâ) tubo aureo breviore, limbo $\frac{3}{8}$-unc. subcitrino rariùs subaureo vel aureo petalis obtusis sepalis acutis longioribus, filamentis $\frac{1}{4}$-uncialibus stylum antheris $\frac{1}{4}$-uncialibus stigmata indivisa tenuia subæquantibus, foliis 4 synanthiis.

13. *Sieberianus ;* C. Sieberi, *Gay, Bull. Fer.* 25, 220, 1831. C. nivalis ; *Bory, V. du Mor.* Flore verno, cormi tunicis tenuissimè sub-reticulato-fibrosis molliusculis (secundum *Gay* foliaceis demum cribrosis exteriore prope basim affixâ) scapo ad apicem ferè vaginæ interioris

Vide infra ad calcem 3867.

Coburgia Trichroma. Three-coloured Coburgia.

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Class and Order.

Hexandria Monogynia.

(Nat. Ord.—Amaryllidaceæ. Subord. Amaryllideæ. §. Pancratiformes.)

Generic Character.—Vide supra Num. 3865.

Specific Character and Synonym.

Coburgia *trichroma ; bulbo* ovato brunneo, *foliis* glaucis obtusis semunciam latis crassis suberectis, *scapo* glauco, *spathâ* viridi pedunculos breves superante, *germine* viridi, tubo coccineo circ. $1\frac{3}{4}$-unc. infra $\frac{1}{8}$-superne $\frac{5}{16}$-unc. lato curvatulo, *limbo* $\frac{1}{8}$-unc. laciniis margine pallido extus coccineis striâ superne mediâ viridi intus pallidiore, *coronâ* brevi dentibus 6 bilobis filamenta alternatim $\frac{5}{16}$—$\frac{7}{16}$-unc. *antheris* luteis. *W. H.*

Pancratium *trichroma ; Llave et Llexarsa.*

The bulb of this species, which flowered at Spofforth in June, 1838, was sent by J. Maclean, Esq., from Lima, having been dug up on the Andes. It appears similar to the plant cultivated in Mexico ; and bulbs which seem to be of the same species have been received from Mechoacan. The true Coburgias are shy flowerers with us, and also in their native country, having a great disposition to waste their strength in producing offsets. They like strong alluvial and manured soil, and are often found wild on inaccessible rocks, on the edge of a precipice, and sometimes deeply imbedded in the drift soil. *W. H.*

interioris elongato, spathâ lati-bracteatâ tubum vaginas unc. superantem ferè æquante, limbi uncialis violacei fauce, (lævi, ni fallor) purpurascente in sicco Sibthorpiano, aurantiaco, *Gay*, stylo subalbido antheras stigmatibus vix incisis paullum superantibus. *Spec. Sibthorp. Oxon. In summis Cretæ et Cypri jugis.—In Troadis et Cretæ montibus. Gay.—Cormum integrum non vidi.*

14. *Fleischerianus ;* C. Fleischeri, *Gay.* Flore verno, cormi tunicis vaginaceis crassis demum merè fibrosis fibris tenacibus subtiliter intertextis, foliaceis reticulatim nervatis nunquam cribrosis exteriore medio affixâ, bracteâ tubatâ, stigmatibus profundè multifidis, limbo albo sepalis extus violaceo-striatis. *Specim. ex Smyrnæ montibus Herb. Hooker.*

§. 2. Involucrati ; *i. e.* scapo involucrato.

§§. 1. Membranacei.

1. *Parvulus ; Herbert.* Flore autumnali ? Cormo parvulo tunicâ badiâ lævi membranaceâ basi lacerâ, involucro, (ni fallor in sicco, quod vix puto) tubato apice brevi obtuso, spathâ tubatâ (ebracteatâ ?) apice bifido, foliis tenuibus hysteranthiis, capsulâ parvulâ apiculatâ, seminibus pallidè badiis apiculatis. *Flos ignotus ; species e minimis ; ex Syriâ capsulâ maturâ foliis angustis subuncialibus mense Martio receptus pluviis æstivis gravatus periit. Spes seminum me fefellit. Spec. in Herb. Hooker deposui ; ic. pict. apud me est.*

§§. 2. Parallelo-fibrosi.

2. *Pyrenæus ; Parkinson, Par. A. D.* 1629. C. nudiflorus, *Smith, Eng. Bot.* 1798, *f.* 491. C. multifidus, *Ramon, Bull. des Sc. de la Soc. Philom.* 1800. C. speciosus, *Wilson, Eng. Bot. Suppl.* 2. 2752. Autumnalis, cormo modico tunicis parallelo-fibrosis, ex basi et zonis omnibus stolonibus elongatis aucto, tunicâ foliaceâ exteriore supra rariùs infra medium, proximâ summo fere cormo affixâ, gemmâ ascendente unicâ, vaginis circiter sex, inferioribus truncatis, duâbus intimis subacutis, proximâ obtusâ, foliis 3—6 hysteranthiis canaliculis costâ dorsali angustioribus marginibus lævibus crassis reflexis, involucro subterraneo tubato laxo uni-bi-floro, spathâ ebracteatâ elongato-exsertâ superne subvirescente, tubo spatham superante fauce lævi, limbo purpureo, filamentis lævibus infra faucem insertis ; stigmatibus subfaciculatè multifidis aurantiacis antheras superantibus. *Floret Septembri ; vestit pascua Pyrenaica passim usque ad* 6,000 *pedum alt. Orientem versùs Cebennæ pascua, in Occidente colles Hispaniæ usque ad Gijon et Santander, Septentrionem versùs Aquitaniam incolit. In Angliâ, prope Warrington, Halifax, et Nottingham, inventus procul-dubio non est indigena. Pluviis apud nos immodicis vigentior ideoque biflorus gaudet.*

§§. Subparalleli, fibris parallelis confluentibus.

3. *Serotinus ; Salisbury, Par. Lond.* 30. *A. D.* 1805. Serotinus, *Ker, supra* 1267, *non verò* C. Campestris, *Herb. Pallas, ibi cit., neque* C. serotinus, *Bertoloni.* Flore autumnali sero, cormo e majoribus

Vide infra ad calcem 3868.

W. Herbert del.

Pub S. Curtis Glazenwood Essex May 1.18:H.

Crocus annulatus Adamicus. Mons. Adam's *var.* of Crocus Annulatus.

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Class and Order.

Triandria Monogynia.

(Nat. Ord.—Iridaceæ.)

Generic Character.—Vide supra N^um. 3861.

Specific Character and Synonyms.

Vide Synop. supra N^um. 3861, *ad calcem.*

C. *annulatus Adamicus* flowers at Spofforth very early, having been kindly sent there by Mons. Gay, who named it C. *Adami.* It will be seen by the descriptions, that all the varieties enumerated conform with each other, and differ from other species in the bulb, and agree also in the naked scape and tubular bracte. I have named the group C. *annulatus,* from the persistent rings, which are the base of the vaginaceous extrafoliaceous coats. Those who like to multiply species may look upon *Annulati* as a section of the Genus, and the varieties as species; they will be at least designated usually by the subordinate names for convenience. Mr. Gay received it from Tauria. *W. H.*

Fig. 1. Section of the Tube's mouth below a Petal, showing the Tufts of Hair. 2. Ditto, below a Sepal, with the Stamen. 3. Naked Scape, with Spathe and Tubular Bracte. 4. The Inflorescence without Spathe, Bracte, or Limb. 5. Inside of a Petal. 6. The rings at the base of the bulb coats.

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majoribus subrotundo tunicâ vaginac. interiore fibris parallelis superne confluentibus, foliaceâ exteriore membran. supra med. corm. interioribus 3 gradatim altiùs affixis, gemmæ vaginis circ. 5, duabus interior. inæqual. acutis cæteris obtusis vel truncatis, scapo brevi, involucro

involucro tubato apice acuto vaginas vix superante ad pedem scapi interdum bracteato, spathâ tubatâ tubum non æquante parte exsertâ viridi-nervatâ, bracteâ acutâ angustâ subæquali basi latiore tubum amplexâ, germine subluteo, tubo violaceo-striato exserto fauce intus pallidissimè flavescente ad laciniarum basim pubescente, limbo griseo-violaceo sepalis extus striis sex pallidioribus intus maculâ ad basim subluteâ, filamentis a tergo canaliculatis summæ ferè fauci insertis subluteis antheras aureas non æquantibus, stigmatibus limbum sæpissimè subæquantibus coccineis erectè breviter fasciculato-multifidis basi sæpius antheras superantibus, foliis circ. 5 synanthiis costâ dorsali canaliculis enervibus latiore marginibus crassis scabris. *Habitat in pinetis Gaditanis et in Alpibus Eliberitanis de la Sierra Nevada. P. Barker Webb, Iter Hisp. p.* 9. *Pie di borro, pes asini Lusitanis, Ker, nomen* C. clusiano, *si non potiùs colchico, proprium. Species cæli Britannici patiens. Flor. Oct., Nov., et Decemb.*

4. *Tingitanus; Herbert. Specim. autumnalia, Herb. Hooker, Bentham, et alibi, a Solyman prope Tingidem lecta.* Flore autumnali, cormo e majoribus subrotundo tun. fibris parall. superne interdum confluentibus, foliaceis superne setosè apiculatis exteriore parum infra med. affixâ, scapo elongato ($\frac{5}{3}$-unc.) involucro acuminatè apiculato apice tantùm germen superante, spathâ tubatâ subobtusâ tubum non æquante, ebracteatâ limbo circ. $1\frac{3}{4}$-unc. longo, filam. antheras non æquantibus, stigmatibus coccineis 5—6-fidis antheras æquantibus limbo longè brevioribus, foliis synanthiis circ. 7 angustis acutis. *Serotino affinis. Vivum non vidi, vix a* Salzmanniano *secernendus.*

5. *Salzmannianus ;* C. Salzmanni, *Gay Bull. de Ferus.* 25. 220. Flore autumnali, c. modico pyriformi, tunicâ vaginac. interiore submembranaceâ demum in fibras parallelas superne acutè confluentes solutâ, exterioribus bâsi persistentibus, foliaceis lævissimis, exteriore crassâ submembranaceâ longè infra medium, proximis gradatim altiùs affixis [spathâ ebracteatâ, per. fauce pallidè flavâ, stigmatibus multifidis, *Gay ; florem non vidi*] foliorum marginibus crassis lævibus, costâ dorsali vix nervatâ canaliculis enervibus plùs duplo latiore. *Hab. teste Gay, circ. Tingidem. Cæli nostri patiens, sed spes florum adhuc me fefellit.*

6. *Clusianus;* C. Clusii, *Gay ib.* Flore autumnali, tun. vaginac. exterioribus basi persistentibus, interiore . . . . ? foliaceis superne reticulatim cancellatis inferne in fibras liberas solutis, exteriore paullò infra med. affixâ, spathâ ebracteatâ, per. fauce albidâ stigmatibus multifidis. *Affinis serotino, habit. circ. Olyssiponem, Gay. Mihi ignotus. Ex conjecturâ meâ* C. Tingitani *et* Clusiani *filamenta canaliculata et perianthii faux pubescens invenientur, quæ si fiant, mihi erit* C. canaliculatus, *v.* 1. *Serotinus, v.* 2. *Tingitanus cum Salzmanniano, v.* 3. *Clusianus.*

7. *Byzantinus ; Parkinson Par.* 168. *A. D.* 1629. *Ker in Bot. Mag.* 1111. *p.* 2. *A. D.* 1808. C. Banaticus, *Gay Bull. de Fer.* 25. *p.* 220. *A. D.* 1831. C. speciosus, *Reichenbach Iconog. Bot. Cent.* 10. C. Iridiflorus, *Heuffel et Reichenb.* Flore autumnali, cormo e majoribus et magis rotundis tunicâ obscurè rufescente, spathâ 1—2

Vide infra ad calcem 3870.

W. Herbert del.

Pub by S Curtis Glazenwood Essex May 1 1841.

Smith.

Crocus lagenæflorus; *var.* lacteus lutescens. Pale Yellow Gourd-shaped Crocus.

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Class and Order.

Triandria Monogynia.

(Nat. Ord.—Iridaceæ.)

Generic Character.—Vide supra Num. 3861.

Specific Character and Synonyms.

Crocus *lagenæflorus;* tunicâ vaginaceâ interiore fibris parallelis prope basim cormi affixâ, non circumscissâ, exterioribus tenuibus membranaceis basi tantùm persistentibus, foliaceâ interiore membranaceâ sæpe obliquè, interioribus summo affixis, *foliis* margine et costâ dorsali ciliatis, canaliculis dorsalibus vix nervatis costâ dorsali latioribus, margine reflexo, *scapo* nudo, *spathâ* laxâ lorato-bracteatâ (bracteâ in cultis sæpe obsoletâ) capsulam persistenter obvolvente, perianthio aureo interdum pallidissimo (colore in cultis maximè variabili), *filamentis* pubescentibus non sulcatis, *antheris* stylum brevem nequaquam multifidum sæpiùs superantibus, capsulâ oblongâ apice purpurascente, seminibus pallidè purpureo-brunneis raphe et chalazâ pallidioribus conspicuis.

Var. 1. *Aureus; Smith;* perianthio aureo, spathâ in cultis sæpe ebracteatâ. *Supra* 2986. *Eng. Bot.* 2646. *Smith, Prod. Fl. Græc.* 1. 24. C. lagenæflorus, γ. *Par. Lond.* 106. In arenosis Græciæ supra argillam.—Flavus? *Su i colli di Chiefalo Ypso da Febbr. a tutto Aprile; fiori gialli aranciati. Prof. Tipaldo Anthol. Ion. Corfiori cyræ.*

Subvar. 1. *Trilineatus;* aureo similis lineis tribus externis cærulescentibus in summo tubo et sepalorum basi, spathâ ebracteatâ. Variat lineis plùs minùs continuatis. Ex semine aurei prognatus.

Subvar. 2. *Sulphurascens;* sulphureo concolore pallidior, fauce concolore, spathâ ebracteatâ. Ex semine aurei prognatus.

Subvar.

Subvar. 3. *Albus;* perianthio albo, spathâ bracteatâ vel ebracteatâ. Ex semine aurei prognatus?

Var. 2. *Lacteus;* pube filam. fortiore, folior. ferè obsoletâ.

Subvar. 1. Concolor. *Sabine Hort. S. Tr. v.* 7. Mœsiacus, β. *supra* 1111. Perianthio lacteo, fauce luteo pallidè maculatâ, spathâ ebracteatâ; albo vix dissimilis. Hab. incert. An ex semine aurei prognatus? nisi sit C. *sulphureus*, θειοχρως, Prof. Tipaldo Anthol. Ion. Corcyræ, sopra il porto Collura (Κολλυρα) a S. Stephano e ne terreni inculti di Catu Garunna (Κατω Γαρυνα) Febr., Mar., vel idem cum C. *Boryano.*

Subvar. 2. *Pennicillatus. Sabine, Hort. S. T. v.* 7. *Ker, supra* 2645; per. lacteo lineis ad sepalorum basim tribus cæruleis, spathâ ebracteatâ. An ex semine aurei prognatus?

Subvar. 3. *Lutescens;* tubo albescente pallidè cæruleolineato, limbo pallidè luteo, fauce et limbi basi maculâ radiatâ saturatè luteâ, spathâ ebracteatâ, foliis latioribus; 4 vel 5 in agro Suffolciano, *Barton Park* dicto, inventi sunt, haud procul (circ. 70 pass.) a loco ubi C. *aureus* et *annulatus argenteus* sponte crescunt.

Var. 3. *Sulphureus,* Subvar. concolor; *Ker, supra* 1384; perianthio aureo-sulphurascente fauce aureâ, spathâ bracteatâ foliis angustis strictis, antheris sterilibus. Senio effœtus; ex aurei semine, puto, prognatus.

Subvar. 1. *Pallidus;* sulphureo similis flore sulphureo-albicante, spathâ, antheris, foliis, ut in præcedente. Procul dubio sulphureo cognatus. *Sabine Hort. S. Tr. v.* 7.

Subvar. 2. *Striatus; Ker, supra* 938; per. aureo-sulphurascente sepalis extus striatis, spathâ, antheris, foliis, ut in præcedente.

Var. 4. *Stellaris, Haworth;* tunicâ vagin. inter. fibris latis parallelis compactâ basi demum liberis supra basim longè infra medium, proximâ tenuiter membranaceâ basi crassâ persistente, foliaceâ exteriore duriore nitidâ obliquè sulcatâ supra medium affixâ, perianthio aureo, sepalis et tubo extus striatis, spathâ, antheris, foliis, ut in præcedente. *Hab. incert.*

Var. 5.? *Syriacus;* tunicis pallidè lætè badiis nitidis, vaginaceâ interiore basi lacerâ superne leviter parallelofibrosâ, foliaceis superne sulcatis exteriore circ. med. proximâ prope med. affix. spathæ bracteâ loratâ, tubo purpurâ striato, limbo vix unciali aureo sepalis extus fusco-purpureo plumeo-tristriatis, foliis angustis, cætera ignotis. *Specim. ex Syriâ prope Aleppo, Russell, Herb. Banks.*

Var.

Pub by S. Curtis Glazenwood Essex May 1841.

HÆMANTHUS TENUIFLORUS ; *var.* Mozambicensis.
NARROW-FLOWERED HÆMANTHUS ; Mozambic *var.*

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Class and Order.

TRIANDRIA MONOGYNIA.

(Nat. Ord.—AMARYLLIDACEÆ. §. AMARYLLIFORMES.)

Generic Character.

Perianthium tubo recto limbo regulari ; *pericarpium* e-valve integumento medio pulpaceo. §. 1. Bulbo subrotundo foliis cylindraceo-vaginantibus undulatis.

Specific Character and Synonyms.

HÆMANTHUS *tenuiflorus ;* umbellâ sub-100-florâ vel ultra demum sphæricâ, scapo pallidè virente dodrantali, spathâ 3—6-valvi viridi valvis acutis sesquiuncialibus bracteis filiformibus, pedunculis uncialibus rubris, germine parvulo luteo-virente, tubo perianthio stylo et filamentis miniatis, tubo $\frac{1}{4}$—$\frac{3}{8}$-unc. limbo unciali genitalibus breviore pallidiore, antheris et polline luteis, foliis latis undulatis, vaginis rubro obscurè maculosis.
Var. 1. *Mozambicensis* tubo $\frac{3}{8}$-unciali.
Var. 2. *Delagoensis* tubo vix $\frac{1}{4}$-unciali. *Herb. Amaryl.* 233. *W. H.*

This fine plant flowered at the beginning of April, with upwards of a hundred flowers, the head becoming ultimately almost sphærical, in the stove at Spofforth, where it had stood the whole year in a hot situation, having been left dry through the winter. The bulb had been received at Rio Janeiro from Mozambic, and was sent from thence to the Hon. W. FOX STRANGWAYS, by whom it was forwarded to Spofforth. There appears nothing to distinguish it from FORBES's Delagoa specimen described H. Am. 233, except the tube being half as long again, but Mozambic being within

within the tropics, and Delagoa Bay eleven degrees to the South, it is probably different in constitution. A bulb sent to Spofforth by Messrs. Loddiges, which has lately flowered, proves to be a scarlet-flowered variety of Hæmanthus *puniceus* (v. *magnifica*) with a very crowded umbel. Another bulb in the stove at Spofforth, imported by Mr. Tate, of the Sloane Street nursery from Para, in Brazil, appears to be the Mozambic plant, but has not yet flowered. Having learned from my son that the bulbs of H. *multiflorus* which he had seen in the islands on the West coast of Africa grew chiefly on old crumbling walls, I have cultivated these successfully by filling the pot to a considerable height with old bricks and pots pounded, putting light loam above, and keeping the round bulb above ground, with its prolonged base under gound. Hæmanthus *Abyssinicus*, brought by a traveller from Abyssinia, flowered very beautifully at the garden of Mr. Little in the King's Road, Chelsea, two years ago ; but no drawing, or careful examination, was made. A strong offset from it is thriving vigorously in the greenhouse at Spofforth, and may be expected to flower with its next shoot. *W. H.*

1—2-florâ, sepalis pallidè nigro-cæruleis ferè albicantibus (i. e. griseo-cæruleis) petala alba superantibus, stigmatibus apice laceris seu plumeis, seminibus parvis rotundis obscuris, foliis 3—4 (in Angliâ cultis autumno tardiùs excrescentibus) ; *teste Parkinson de C. Byzantino.* Sepalis lilacinis, petalis albis minoribus lanceolatis ; *teste Reichenb. de Specioso perperam dicto et prope Krassoviam (Krajova) in Banatu et Wallachiâ lecto.* Tunicis paucis, vaginaceis demum in fibras liberas solutis, foliaceis subtiliter reticulatim nervatis, foliis hysteranthiis omnibus supra medium tuber affixis, spathâ ebracteatâ, stigmatibus multifidis, perianthio violaceo autumnali ; *teste Gay, qui ex Banatu et Transylvaniâ affinem Pyrenæo et medio esse monet. B. d. F.* 25. 220. *C. Banaticum eundem esse ac Speciosum Reich. et iridifolium R. et H. monet in literâ cl. Gay, ideoque ad Byzantinum proculdubio referendum censeo. Campestri affinis mihi videtur.*

8. *Versicolor ; Ker ; supra* 1110. Flore verno, c. tun. vagin. duâbus interioribus infra non circumscissis fibris duris confertis parallelis acutè confluentibus prope basim, foliac. exter. nitidâ membranaceâ infra medium affixâ, involucro apiculato spathâ dimidio breviore, spathâ biflorâ exsertâ bracteam loratam angustam æquante, perianthii fauce lævi sæpius sublutescente, filamentis lævibus non canaliculatis $\frac{1}{8}$-unc. infra faucem insertis, antheris stigmata subtruncata ferè æquantibus, foliis canaliculis nervatis costâ dorsali latioribus marginibus vix reflexis (sæpe obsoletè) subscabris.

Var.

Vide infra ad calcem 3871.

Var. 6.? *Luteus, Lam. Enc.* 6. 385; t. externis membranaceis tenuibus basi circumscissâ tantùm persistentibus, tun. vag. interiore parallelo-fibrosâ prope basim affixâ, foliaceâ exteriore durâ nitidâ sulcatâ supernè confluenter fibrosâ apiculatâ longè infra medium vel obliquè affixâ, foliorum canaliculis fortiùs nervatis, spathâ bracteatâ perian. majore aureo fauce extus lineatâ.—C. vernus, *perperam supra* 45.—C. Mœsiacus, *Ker. Habitatio incerta, sed procul dubio inter Istrum et Peloponesum sita. Valdè robustiorem, senio tamen apud nos sterilem, ex semine aureo prognatum vix credo.*

Var. 7.? *Olivierianus*; ipse non novi. C. Olivieri, *Gay, Bull. de Ferus.* 25. 219; tunicâ vag. ext. ut in aureo et luteo, foliaceis lævissimis supra medium affixis, foliorum basibus (petiolis, *Gay*) liberis, bracteâ (dimidiatâ, *Gay*) loratâ, stigmatibus 4—6-exasperatis. *Habitat in insulâ Chio; Gay. W. H.*

Four or five bulbs of this exceedingly pretty Crocus were discovered at different times fifty or seventy yards apart under trees, and within one hundred yards from the spot where C. *lagenæflorus aureus*, and C. *annulatus argenteus* are naturalized under certain oak trees within a space about a quarter of a mile in circumference in Barton Park, Suffolk, by Mr. Turner, the intelligent gardener of the Bury Botanical establishment. I apprehend the reason why these bulbs are found only under the trees to be, that the grass is there less vigorous, and the shade of the branches and suction of the roots prevent their rotting during the season of rest in very wet autumns. *Aureus* is found to be established also under some trees in the gardens of Wentworth House in Yorkshire, and the seed collected from them having been sown by Mr. Cooper in a dug border has produced much variety, many with the dark lines, which are peculiar to *luteus*, more or less perfectly marked, some like *sulphureus concolor*, but with perfect anthers, some nearly as pale as *lutescens*, and one perfectly white, which is supposed to have sprung from that seed, is, with the other varieties, now at Spofforth. There is no variability amongst the Croci under the trees either in Suffolk or at Wentworth; but one from Suffolk flowered one season semidouble with faint purple lines, and the next season single and without lines. Under the Suffolk trees they have the lorate bracte, but I have seen it short and small in one or two; and at Wentworth they are chiefly without the bracte;

bracte; and in one specimen of *luteus* growing with them in the seed bed it was wanting. The absence of the floral bracte constituted the only difference except colour between *lagenæflorus* and *lacteus* of which no native situation is known, and the reason for dividing them fails. Mr. Young of Milford nursery has a stock of *lacteus concolor*, supposed to have been raised from foreign seed, but the gentleman who introduced them is dead. C. *Boryanus* of Monte Nero in Cephalonia and the hills near Modon and Navarino is very like *lacteus concolor*, but it has the lorate bracte, and flowers in October. I have never seen it alive. In Greece, C. *aureus* grows in sand upon clay; and it seems that, cultivated in our country, it is so disposed to sport, that the *sulphurei* and *luteus* as well as the *lactei* may have proceeded from it; but I rather consider *luteus* to be a natural variety from some colder situation between the Danube and the Morea. I do not see sufficient cause for separating C. *Syriacus* without further examination of a live specimen; nor C. *Olivieri* of Mons. Gay, from the very slight notice given of it by him from a dry specimen; but I think it doubtful whether the four last varieties should be looked upon as separate species, if the native country of C. *luteus* and *stellaris* could be ascertained. It is quite evident, that the Croci, which do not ripen their seed abundantly in our climate, become quite sterile from long reproduction by offsets. The history of *lutescens* is singular, for no variety appears on the spot where the *aurei* grow; and if *lutescens* proceeded from them, why is it found at a distance? It is probably an old variety, and originally set where it has been found; and it may possibly be the *sulphureus* of Prof. Tipaldo from Corfu. No Crocus is indigenous in Great Britain. I remember seeing in 1809 Mr. Williams's C. *lacteus concolor (mæsiacus*, β., supra 111), and it was far from being white. He had but one bulb of it, and I have never seen exactly the like, though Mr. Ker speaks of having seen several. Mr. Strangways possesses *albus*, but knows not where he obtained it. I have this spring observed two bulbs of the Suffolk *aureus*, which I am satisfied were plain golden when sent from thence, of which one is now striped exactly like *luteus*, and the other, which is planted in peat, with three fainter stripes the whole length of the sepals. *Luteus* may be a remarkable seminal variety from *aureus* in cultivation. *W. H.*

Pub by S. Curtis Glazenwood Essex May 1841

Bomarea acutifolia; *var.* punctata. Sharp-leaved Bomarea; speckled *var.*

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Class and Order.

Hexandria Monogynia.

(Nat. Ord.—Amaryllidaceæ. Subord. Hypoxideæ. §. Alstrœmeriformes.)

Generic Character.—Vide supra Num. 3863.

Specific Name and Character.

Bomarea *acutifolia*, v. maculata; *umbellâ* 10- vel ultra-florâ, *involucri* valvis angustis viridi-rubescentibus, *pedunculis* 1—2-floris minutè bracteatis cum germine rubro-pubescentibus, *perianthio* subæquali subunciali sepalis obovatis $\frac{3}{8}$-unc. latis aurantiaco-coccineis viridi-apiculatis intus lutescentibus, petalis spathulatis extus pallidioribus intus saturatè punctatis marginibus inferne approximatis, *filamentis* lævibus, *antheris* purpureo-virentibus, *operculo* et *styli* basi pubescentibus, *seminibus* saturatè aurantiaco-coccineis. Ex Caraccas. *W. H.*

This showy Bomarea was imported by T. Harris, Esq., of Kingsbury Grove, from Caraccas, and having been kindly sent by him to Spofforth, it flowered at the end of several shoots in the latter part of the summer of 1840, and perfected its seeds in December. It is not to be distinguished as a species from the Mexican *acutifolia*, but is more conspicuous. *W. H.*

Fig. 1. represents a Stamen before and after inversion. 2. A Petal. 3. The inside, and 4. the outside, of a Sepal.

Var. 1. *Princeps; supra* 1110. C. insularis, *var.* major. *Gay in literâ, cum plantâ ipso teste ex Corsicâ, quæ proculdubio C.* versicolor *Ker ipsissimus est.* Scapo brevi perianthii fauce lutescente, tubo

tubo brevi, limbo pallidè purpurascente sepalis (et sæpe petalis) extus plumeo-tristriatis, foliis suberectis canaliculis uninervibus vix subscabris.

Var. 2. *Gallicus ;* C. meridionalis, *Osborne Hortul. Cat.* Germine involucrum superante, per. fauce lutescente, petalis extus plumeo-purpurascentibus, sepalis extus pallidè stramineis tristriatis, foliis depressis vix subscabris canaliculis binervibus. *In confiniis Galliæ et Italiæ circa Nicæam.*

Var. 3. *Caucasicus. Spec. Herb. Hooker, ex montibus prope Tifflim.* Tunicâ exteriore fibris parallelis superne confluentibus, germine in fauce involucri sito, bracteâ ut in cæteris, limbo $1\frac{3}{4}$-unc. (ut videtur in sicco) purpurascente ?

Var. 4. *Dalmaticus. Spec. Herb. Hooker, et Herb. Bentham. ex Dalmatiâ.* Caucasico similis minor foliis angustioribus.

Var. 5. *Lineatus ; Sabine Hort. S. Tr.* 7. 464 ; foliorum canaliculis binervibus margin. ciliatis ; *var.* culta ; huic tamen consimilis dicitur in Siciliâ indigena, nescio cujus Italici C. *Siculus,* MS.

Varietates cultæ C. *versicoloris* permultæ et perpulchræ sunt.

9. *Insularis ; Gay, Bull. de Ferus.* 15. 221. Flore verno, tun. vag. interiore fibris parallelis superne confluentibus infra demum liberis, foliaceâ exter. læviore paullum infra medium affixâ, spathâ ebracteatâ, limbo purpurascente, sepalis extus plumeo-tristriatis, germine striato apice purpureo, " seminibus teste *Gay* badiis raphe et chalazâ pallidis," foliis lævibus costâ dorsali canaliculis enervibus parum latiore. *Habit. Sardiniam et Corsicam. Species inter versicolorem et minimum ; variat, in speciminibus siccis quæ ex variis Corsicæ locis recepi, fibris plùs minùs reticulatim confluentibus, vix a minimo secernendus, spathâ tamen in omnibus ebracteatâ ; bulbi, tun. vix reticulatis, nondum apud me floruerunt.*

10. *Imperatonianus.* C. Imperati, *Tenore.* Flore verno, c. tun. vaginaceâ interiore fibris parallelis superne et rariùs inferne confluentibus, externis tenuibus membranaceis, foliaceâ exteriore crassâ intus glabrâ extus confertim confluenter parallelo-fibrosâ circ. vel infra med. affixâ, involucro scapum infra arctè amplexo, spathâ bracteæ tubatæ acuminatæ æquali, perianthii fauce lævi luteâ, stigmatibus croceo-coccineis incisis antheras superantibus, foliorum canaliculis enervibus costâ dorsali latioribus margine lævi, capsulâ 6-striatâ, seminibus pallidè badiis demum brunneis raphe et chalazâ rugosis.

Var. 1. *Princeps ;* limbo violaceo sepalis extus stramineis plumeo-3-striatis, foliis suberectis. *Hab. colles humiliores siccos dumosos prope Neapolim.*

Var. 2. *Rupestris, Tenore ;* idem foliis depressioribus.

Var. 3. *Albus.* Limbo albo sepalis extus albis 3-striatis. *Ex Neapoli a cl. Tenore missus.*

Var. 4. *Montanus.* Limbo albo, sepalis extus stramineis non striatis. *Habitat montes* 2,000 *vel* 3,000 *ped. altiores prope Neapolim ; in regione quâdam intermediâ nullus invenitur.*

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§§. 3. Subreticulati, superne reticulati.

11. *Suaveolens ; Bertoloni. Supra* 3864. Flore verno. Differt ab *Imperatoniano* tun. fibris superne reticulatis, spathâ semper ebracteatâ,

Vide infra ad calcem 3873.

Pub by S.Curtis Glazeley Road Essex May 1 1841

Sprekelia Cybister. The Tumbler Sprekelia.

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Class and Order.

Hexandria Monogynia.

(Nat. Ord.—Amaryllidaceæ. Subord. Amaryllideæ. §. Hippeastriformes.)

Generic Character.

Perianthium declinatum basi annulari inferne abbreviato vix tubato ; filamenta fasciculata declinata labio inferiore prope basim comprehensa.

Specific Character.

Sprekelia *cybister ;* scapo forti subterete ultrabipedali diam. $\frac{5}{8}$-unc. glaucescente inferne sanguineo 4-floro, spathâ rubescente mox marcescente subbiunciali, pedunculis ultra uncialibus, germine cubante, perianthio inferne rubro superne subvirescente, laciniis inferne latis intus pallidè striatis superne longè angustatis, labio inferiore genitalia quinqueuncialia amplexo *precipitato* apicibus reflexis, sepalis margine involuto reflexis duobus inferioribus inferne obliquè latere superiore dilatatis, petalis superioribus subplanis apice tortuosè demisso, petalo imo scapum attingente, membranâ fauciali barbatâ, stigmate trilobo parvo subrubescente, filamentis cum stylo apice sub-assurgente precipitatis, e sepalinis superiore elongato, e petalinis inferiore abbreviato, foliis hysteranthiis viridibus apice obtuso rubro circ. $1\frac{1}{4}$-unciæ latis, bulbo ovato fusco diam. biunciali.—*Ex Boliviâ. W. H.*

This very remarkable plant flowered in the greenhouse at Spofforth in April, 1840, the bulb having been kindly sent

sent to Spofforth from Boston in North America by J. W. Bootт, Esq., who had purchased it at Mr. Knight's nursery on the King's Road, Chelsea, and it is stated to be a native of Bolivia. It conforms very closely in structure with Sprekelia *formosissima*, and agrees with it in having pollen narrower, and more acute than Hippeastrum. The two genera are closely allied, but no Hippeastrum has the filaments closely embraced by the lower lip, being enclosed by a dilatation of the lower part of the two inferior sepals. The nearest approximation is in H. *Aulicum*, of which the inferior petal compresses the filaments, (in which respect as well as in the non-radiation of the central colour, it differs from *platypetalum* and *glaucophyllum*, which can scarcely be considered of the same species,) but there is no dilatation or involution of the upper margin of the sepals, as in Sprekelia. The posture of the flower of S. *cybister* is very singular. When the buds first break through the spathe, the germen is not distinguishable from the peduncle, and at that period, the most experienced eye examining it with a magnifier, would think it had a sessile germen, and mistake the peduncle and germen for a tube. On the following day the germen marks itself and becomes horizontal; on the next, the bud plunges down, and the point touches the scape, aud in that singular posture, the buds look like heads of a crane pecking its neck. After a day or two they rise from the scape, when the lower lip, with the filaments and style, falls perpendicularly. In its complete expansion the point of the lower petal touches the scape, the upper sepal has the end reflex, and the two upper petals become reflex, with the ends tortuously drooping; the ends of the style and filaments become more disengaged, and curve irregularly upwards. The leaves do not appear till after the flowers are passed, or if the point of a leaf appears, its progress is suspended. The plant likes rich alluvial loam, and should be left dry in the winter in the greenhouse. It is not ascertained whether it will bear an English winter in the open ground like *formosissima*. It forms a second section of Sprekelia, differing from *formosissima*, *glauca*, and *cinnabarina* lately flowered at Spofforth, in the elongation or abbreviation of the odd filaments in each lip. *W. H.*

Fig. *a.* represents a Flower cut off and placed horizontally. *b.* A Flower, with the Limb cut off, showing the upper, lower, and two lateral Stamens, and the bearded membrane at their insertion. The two corresponding laterals are omitted to avoid confusion.

ELISENA LONGIPETALA. LONG-LIMB ED ELISENA.

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Class and Order.

HEXANDRIA MONOGYNIA.

(Nat. Ord.—AMARYLLIDACEÆ. Subord. AMARYLLIDEÆ. §. PANCRATIFORMES. §§. 2. SEMINIBUS CARNOSIS.)

Generic Character.

Perianthium tubatum tubo brevi subcylindrico decurvo limbo reflexè patulo coronâ cylindraceâ deflexâ complanatè depressâ, *genitalia* subfasciculatè declinata recurvata, *antheræ* breves incumbentes medio affixæ, *ovula* margaritacea erecta, *semina* viridia rotunda, *bulbus* fibris crassis persistentibus. Plantæ Americanæ, arenis gaudentes.

Specific Character and Synonym.

ELISENA *longipetala ;* scapo ancipiti tripedali viridi, spathâ biunciali marcescente bracteatâ, floribus circ. sex, pedunculis $\frac{1}{4}$-uncialibus, germine trigono $\frac{5}{8}$-unc. tubo viridi $\frac{3}{8}$-unc. limbo albo ultra-triunciali basi virente apice revoluto, coronâ concolore complanatè subcylindricâ petalo imo adpressâ, dentibus interstamineis revolutis irregulariter trifidis, genitalibus semifasciculatè assurgenter declinatis, stylo coronam 3-uncias filamenta unciam ferè superante, polline pallidè flavo, ovulis binis in loculo singulo, seminibus magnis, foliis 8 acutis laminâ $1\frac{3}{4}$-unc. latâ viridi 18—21-uncialibus columnâ cylindraceâ sub-16-unciali. *W. H.*

ELISENA longipetala. *Bot. Reg.* 24. *Misc.* 79.

This plant was imported by RICHARD HARRISON, Esq., and having flowered with him at Aighburgh, near Liverpool, was described in the Appendix to the Botanical Register for 1838. Our specimen flowered at Spofforth in the greenhouse at the end of March in a six inch pot of white sand, with a very small admixture of loam, and produced eight leaves, with a scape above a yard high, and six flowers. It would undoubtedly succeed as well as ISMENE *amancaes* in a bed of white sand out of doors, if it can be kept back from

from shooting so early in the spring, which will probably be effected without difficulty. The bulbs of Ismene need not be set till May, and notwithstanding the want of warmth in the summer of 1839, I. *amancaes* had ripened seed out of doors at the commencement of July, and some of the bulbs continued flowering till August. E. *longipetala* has completely the aspect of an Ismene. The form of Ismene *deflexa*, which has the cup reclining on the lower petals, and the upper filaments too long to fall into the cup, and therefore lying like bars across its mouth, brings the two genera nearer together, and makes it a question whether Elisena may not be rather a section of Ismene. It differs in having the filaments long, almost fasciculate, declined with the points curved upwards, and the cup narrowly cylindrical, flattened as if by pressure from above, and the tube very short. If the bulb sent to Spofforth from Lima for E. *ringens* be correct, it has also a long column to the leaves, and the aspect of an Ismene, and the figure in the Flora Peruv. is quite incorrect, but, as the plant has not flowered, it may perhaps not be correct. There seems to be a third species amongst Mr. Maclean's specimens from Caxamarquilla on the East side of the Andes, (alt. 10,000 feet,) which differs from *ringens* in having a longer spathe, and filaments only half the length. The leaves also differ in being blunt, if the right leaves, which are detached, have been placed with the flowers. It will be desirable that live specimens of the three species should be inspected before any decision is made as to the question, whether Elisena should be considered as a section of Ismene, which seems probable. The cup of E. *longipetala* properly leans on the lower petal, but the flower is apt to take a little twist, which throws it on the lower petal and one of the lateral sepals. The three species agree in a similar short bent tube, unlike that of Ismene. The fibres of both Ismene and Elisena are very thick, fleshy, and permanent, continuing as sound as the bulb itself when kept through the winter in dry sand. The seed of E. *longipetala* is large, round, and green, like that of Ismene. I. *deflexa* flowered finely in the open border at Spofforth at the end of July and in August, and bore the cold wet season of 1840 better than *amancaes*. *W. H.*

Amaryllidaceæ.

Elisena sublimis; scapo dodrantali, spathâ triunciali sexflorâ pedunculis $\frac{3}{8}$—$\frac{3}{4}$-unc. tubo $\frac{3}{8}$-unc. limbo albescente biunciali filamenta $\frac{3}{4}$-unc. superante, coronâ circ. $\frac{3}{4}$-unc. acutè pluridentatâ, stylo limbum subæquante vel semunciam demum superante stigmate minuto. *Specimen in Andibus Caxamarquillæ a dom. J. Maclean lectum.* *W. H.*

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teatâ, stigmatibus integris pallidioribus odoratissimis; quoad cætera v. principi consimilis. *Habit. Terracinam, montes d'Ittri, prope Fundos, et Romæ Valle d'Inferno.*

12. *Minimus; Decandolle;* Redouté Lil. 2. 81., *non supra* 2991. Flore verno, c. tun. vagin. interiore reticulatâ, spathâ bracteatâ, perianthio violaceo sepalis extus striatis, stigmatibus brevibus subintegris aurantiacis. *Habit. Corsicam. Ipse non vidi, et in dubio mihi est an Insularis a Minimo secernendus sit.*

13. *Cambessedesianus;* C. Cambessedesii, *Gay, B. F.* 15. 220. Flore autumnali, c. tun. vaginaceis basi persistentibus, foliaceis interioribus lævissimis, exteriore basi demum in fibras liberas solutâ imo cormo affixâ, spathâ bracteatâ, seminibus demum brunneis raphe et chalazâ pallidis. Affinis C. *minimo,* secundum *Gay;* habit. Majorcam, mihi ignotus. Descriptio prorsus insufficiens; si *minimo* præcipuè affinis, tunicam præcipuam *reticulatam* esse conjicio. Forsan *Odoro* affinis?

§§. 4. Reticulati.

14. *Odorus; Zerapha, Flor. Melit. non Bivo cum cujus a Zeraphâ confusus est.* Flore autumnali cormo modico ovato tun. vagin. ad basim affixis fibris reticulatis non cribrosis, foliaceis nitidis vix nervatis inferiore infra medium cæteris summo cormo affixis, germine purpurâ striato vel superne maculato, scapo brevi, involucro brevi germen acumine superante, spathâ ebracteatâ elongatâ superne virescente acuminatâ, tubo albo purpurâ sex-striato exserto, fauce luteâ intus ad petalorum basim subbarbatâ limbo circiter unciali lilacino laciniis ad basim extus saturatè tristriatis, sepalis extus pallidioribus, filamentis antheras longit. superantibus pallidè flavis infra faucem insertis, stigmatibus aurantiaco-coccineis truncato-dentatis antheras sæpissimè æquantibus odoris, foliis angustis proteranthiis marginibus densè ciliatis costâ dorsali leviter sulcato canaliculis enervibus duplo latiore. *Crescit in Monte Verdalá Melitensi, cæli nostri non satis patiens.*

15. *Longiflorus; Rafinesque Caratt. p.* 84. C. odorus, *Bivo Bern. St. rar. Sic.* 3. *p.* 8. C. serotinus, *perperam Bertoloni Desc.* Flore autumnali, cormo parvo tunicis vaginaceis brunneis fibris superne reticulatis inferne ferè parallelis prope basim, foliaceâ exteriore reticulatâ medio cormo vel infra affixâ, gemmæ vaginâ interiore subacutâ, tribus externis obtusis, scapo unciali vel ultra, involucro germen superante, spathâ ebracteatâ longè exsertâ subobtusâ superne viridi, tubo flavescente spatham plùs unciâ superante, fauce luteâ intus sub petalorum basim pubescente, limbo ultra sesquiunciali lilacino ad basim intus saturatè luteo, filamentis luteis lævibus intra faucem insertis, antheris luteis, stigmatibus aurantiaco-coccineis truncato-dentatis odoris, foliis lævibus angustis synanthiis lævibus costâ leviter sulcatâ canaliculis enervibus vix latiore, seminibus subrotundis rufo-brunneis. *Crescit passim in pratis maritimis Siciliæ, in montibus di val di Mazzaro et Panormitanis, (in Dalmatiâ, teste Bertoloni) in monte Stellâ prope Pæstum, in pascuis montosis Calabriæ, Serrâ, et Morgianâ. Floret Octobri cæli Britannici patiens. Si maris* C. odorus *Bivo.* Var. 1. Longiflorus, *Rafinesque.* Var. 2. Melitensis, *Odorus, Zerapha.*

16. *Medius,*

16. *Medius, Balbi. Bertol. Descr.* 9. *Gay, Bull. Fer.* 1827. *p.* 8. *et* 29. Flore autumnali, cormo e majoribus, tunicis reticulato-cancellatis, non stolonifero, spathâ ebracteatâ, tubo prælongo exserto, perianthio grandi violaceo, stigmatibus profundè multifidis penni-cillato-effusis croceis, foliis hysteranthiis. Non vidi. *Differt secundum Bertoloni a* Pyrenæo *cormo non* stolonifero, *tunicis cribroso-cancellatis, spathâ et vaginis magis acuminatis, perianthii laciniis latioribus saturatioribus, stigmatibus non aurantiacis. Involucratum esse a comparatione cum* C. Pyrenæo *censendum est; si nudus, futilis est ista comparatio, et eodem pacto nomen* medius *(a mediatate quâdam non verâ, inter* longiflorum *et* Pyrenæum*) futile evadet, et* C. Cancellati *var.* Balbisiana *vel* Italica *erit iste* C. medius, Balbisianus. Crocus *nudus ebracteatus indigena nullibi inventus est. In* lagenæfloro *culto bractea obsolescit.* C. cancellatum *nudum bracteatum esse censeo; si fallor in sicco, involucratus ebracteatus est, quo pacto* C. medius *erit var.* 3. Balbisiana *Croci cancellati.*

17. *Pallasianus.* C. Pallasii, *M. a Bieb. Sup.* Flore autumnali, c. modico tun. exteriore tenuiter reticulatâ foliaceis superne setosis, spathâ bracteatâ, limbo purpurascente tubi parte exsertâ longiore fauce barbatâ, stigmatibus erectis truncatis limbo brevioribus antheras subæquantibus, foliis angustissimis laxis ferè synanthiis seriùs excrescentibus. *Habitat in collibus apricis Tauriæ florens Sept. Oct.* C. *Thomasiano* affinis, minor tubo brevi, limbo pallidiore striato, foliis angustioribus; nescio an ciliatis. Vidi siccum cormo cum tunicis tenuiter reticulatis circ. semunciali, foliis 7 ferè filiformibus circ. $\frac{5}{8}$-unc. exsertis tubum pallidum involucro vix longiorem æquantibus, limbo unciali pallidè violaceo extus ad basim saturatè striato; de bracteis nihil novi.

18. *Thomasianus.* C. Thomasii, *Tenore.* Flore autumnali, c. tun. fibris superne reticulatis inferne parallelis, foliaceis apice subsetosis, involucro (quoadvidi) ad basim scaporum singulorum bracteato, spathâ (quoad in culto vidi) ebracteatâ sed (teste Flor. Ital.) in indigenis bracteatâ involucrum subæquante vaginis breviore, tubi parte exsertâ nudâ, limbo sesquiunciali saturatè purpureo estriato petalorum basi minutè barbatâ, sepalorum lævi, filamentis pallidè flavescentibus circ. $\frac{1}{8}$-unc. infra faucem tubo insertis, stigmatibus truncatis indivisis odoris antheras subæquantibus limbo dimidio brevioribus, foliis angustis circ. $\frac{1}{16}$ latis synanthiis seriùs excrescentibus costâ dorsali vix nervatâ canaliculis enervibus latiore, capsulâ estriatâ, seminibus *(Flor. Ital.)* intensè violaceis.

Var. *Princeps.* Foliorum marginibus et costæ angulis densè ciliatis. *Vidi vivum.*

Var. *Lævis;* foliis non ciliatis. *Flor. Ital.* non vidi. *Crescit in Calabriæ sylvis mont. La Serra,* Thomas; *Lucaniæ La terza, Potenza alle Faje, et Montocchio.*

19. *Sativus, Linnæus; Red. Lil.* 173. C. autumnalis, *Engl. Bot.* 343.; autumnalis, *Lam.;* sativus, *Royle.* Flore autumnali, cormo e majoribus valdè prolifero, tun. fibris stipatis reticulatè confluentibus, foliaceis apice setosis exteriore infra med. c. affixâ, vaginis 8—9, interiore (rarò tubatâ) basi tantùm inflatâ integrâ, cæteris tubatis

Vide infra ad calcem 3874.

W.Fitch del.

Pub by S. Curtis Glazenwood Essex Jan.1841.

Swan Sc

EUTERPE MONTÁNA. MOUNTAIN EUTERPE.

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Class and Order.

MONŒCIA HEXANDRIA.

(Nat. Ord.—PALMÆ.)

Generic Character.

Flores monoici in eodem spadice, *spatha* simplici, interiore minore cincto sessiles, bracteati, masculi plures in parte ramorum superiore, v. bini juxta femineos singulos.—MASC. *Calyx* triphyllus, foliolis ovatis, carinato-concavis, æstivatione imbricatis. *Cor.* tripetala, petalis ovatis v. lanceolatis, erectis, æstivatione valvatis. *Stamina* 6, e fundo floris; *filamenta* subulata, libera, v. basi confluentia; *antheræ* lineares, subsagittatæ, basifixæ.—FEM. *Calyx* triphyllus et corolla tripetala, æstivatione convoluto-imbricata. *Staminum rudimenta* nulla. *Ovarium* triloculare, loculis duobus minimis. *Stigmata* 3, sessilia. *Bacca* unilocularis, monosperma, stigmatibus excentricis coronata, grumoso-fibrosa, endocarpio tenui membranaceo cum nucleo connato. *Albumen* ruminatum. *Embryo* lateralis v. subbasilaris.—Palmæ *Brasilienses sylvicolæ, gregariæ; caudice elato, gracili, apice sæpius flexuoso, annulato, lævigato, intus fibroso, molli, frondibus omnibus terminalibus,* petiolis *basi longe vaginantibus, pectinato-pinnatis,* pinnis *acuminatis,* spadicibus *infra frondes simpliciter ramosis, ramis fructiferis divaricato-patentibus, tomento granuloso aut furfuraceo, fuscidulo v. albo inductis, spathis membranaceo-coriaceis,* floribus *imprimis inferioribus sive femineis distincte bracteatis bibracteolatisque, ochroleucis v. roseis,* fructibus *globosis, sordide violaceis. Endl.*

Specific Character and Synonym.

EUTERPE* *montana;* foliis elliptico-obovatis, pinnis integerrimis lanceolatis patulis apice attenuatis, petiolis inermibus

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* So named from one of the Muses, who presided over wind instruments.

mibus subtus lepidotis, spathæ valvula exteriore interioribus triplo breviore, spadicis ramis floriferis patentissimis, floribus laxis per pares (fl. mas. cum fl. fem.) scrobiculis ramorum dispositis, fructu subrotundo. *Graham.*

ARECA montana. *Hort. Cantab.*

The plant here described was received at the Botanic Garden, Edinburgh, from Grenada, in 1815, through the kindness of Mr. Ross, and produced for the first time in 1837 a spathe, which never attained its full size; nor did it open, but remained above a year upon the tree. In 1838, one, somewhat more perfect, was formed, and, bursting, allowed the escape of a spadix, which, however, never unrolled, but remains still on the tree, imperfectly unfolded. Now, there are three spadices upon the plant, all perfect, and exposed by the falling of the leaves; but from the lowest only the spathe has yet dropped. The outlines of others may also be perceived within the sheathing bases of leaves which are still on the tree. Mr. LODDIGES writes to me, that a tree has been in flower with him for two years, and the succession of spadices formed and forming upon one plant, shows that the same thing will occur with us.

The portion of the plant which is eaten, either as a fresh vegetable or as a pickle, is the terminal bud and the soft interior of the after part of the stem. Many of the palms may be used, or misused, for the same purpose.

DESCR. *Stem*, in our plant, ten feet high, marked in its whole height with completely annular scars left by the fallen leaves, dilated at its base into a nearly globular swelling, subcylindrical from this upwards, till the dilated sheaths of the leaves near the top give the appearance of another enlargement, but much more elongated, and of much less considerable diameter than that below. *Leaves* (nine feet long) elliptico-obovate, pinnated; *petioles* at their origin sheathing and embracing each other, unarmed, glabrous, without leafets (for about two feet) at the base; *rachis* rounded below, above, for some way, flat, and, towards the apex, keeled; sides formed into a broad, oblique, and shallow groove, into which the leafets are inserted; *leafets* lanceolate, entire, glabrous, alternate, spreading wide, concave on the lower side of their base, each having a strong middle rib and several smaller lateral ones, the former prominent with a sharp edge above, attemuated at their apices, where, for a time, they are connected to each other by an

almost

almost filamentous prolongation. *Spathes* several upon the tree at a time, solitary in the axils of the lowest leaves, exposed only when the leaf falls, coriaceo-ligneous, bivalvular, brown externally, yellow within, glabrous, deciduous; *outer valve* bifid and two edged, obliquely open at the apex, closed below, but afterwards splitting to its base along the lower side; *inner valve* narrow-lanceolate, acuminate, subcompressed, without wings, attached to the spadix (about an inch and a half) above the outer, and thrice as long as it, everywhere closed, but afterwards splitting along the whole of the lower side to permit the escape of the spadix. *Spadix* as long as the inner valve, rising from a turgid, dark brown, and cracked base, which becomes slender as it passes round two-thirds of the stem, much branched and attenuated upwards, *branches* at the base subarticulate and swollen, spreading, both while in flower and fruit, at right angles, attenuated to their apices. *Flowers* very numerous, and as well as the whole spadix (except its dilated base) white and glabrous, scattered, generally in pairs, unisexual, a staminiferous and pistilliferous flower being generally together and indented into the spadix, the former opening freely and deciduous, the latter later and never fully. *Perianth* double, coriaceous; *calyx* triphyllous; *corolla* three-petaled, imbricated. *Male flower*, calyx small, segments keeled; *petals* ovato-elliptical; *stamens* six, equal in length to the corolla, filaments fleshy, slightly imbricated, dilated and cohering at the base, *anthers* ovato-oblong, *pollen* white; *pistil* abortive, conical, three-dentate, teeth erect. *Female flower* surrounded by a small, membranous, persistent, monophyllous bractea; *calyx* larger than in the male: *petals* broadly ovate, adpressed to the germen, even after the apex of this is thrust beyond them; *stamens* in by far the greater number of flowers altogether wanting, or, two or more, more or less imperfect, and that as far as I have observed only towards the apex of the branches of the spadix, where the flowers are occasionally solitary; *germen* ovate, its apex at length protruded a little beyond the adpressed petals, one cell only develloped; *stigmata* three, sessile, small, subacute, spreading; *ovulum* rounded, single in the base of the ovary, but attached laterally. *Graham.*

Tab. 3874 represents a flowering plant of EUTERPE *montana* on a very reduced scale, from a drawing by Dr GREVILLE. Fig. 1. Young Spathe. 2. Spadix and inner Spathe. 3. Branch of the Spadix, with male and female Flowers; *nat. size*. 4. 5. Male Flowers. 6. Female ditto; *magnified*. 7. Portion of the Branch of a Spadix with Fruit; *nat. size*. 8. Single Fruit; *magnified*.

tubatis truncatis, involucro (rarò tubato) acutè lorato scapum amplexo bracteâ brevi obtusâ (interdum erosâ) inter ipsud et scapum, bracteâ longiore angustâ acutâ scapo elongato breviore oppositâ interdum obsoletis, spathâ tubatâ apice acuminato exserto bracteâ loratâ acuminatâ æquali in pedunculo brevi, bracteâ minutâ oppositâ in sinu spathæ interdum obsoletâ, germine cylindraceè oblongo albo ultrasemunciali, tubo superne exserto purpureo-maculato, limbo saturatè purpureo petalorum basi minutè barbatâ, sepalorum lævi, filamentis ori ipsi tubi insertis, stigmatibus coccineis truncatis pendulis odoris antheras superantibus, foliis subundecem subsesquipedalibus marginibus et costæ angulis ciliatis costâ dorsali fortiter nervatâ canaliculis enervibus latiore. Vidi *semel* vaginam interiorem tubatum et involucrum in eodem specimine conforme; *bracteæ* minores sæpe deficiunt, exuberantiâ scilicet enatæ plantæ dudum cultæ, cujus patria ignota est; nisi ex C. *Thomasiano* culturâ mutatus, verisimiliter ex oriente; colitur in abruptis Italiæ ubi culturæ veteris vestigia faciliter indigenam mentiuntur. Apricis gaudet, alibi vix floret.

An potius? C. *truncatus, Herbert.* Var. 1. *Pallasianus;* var. 2. *Thomasianus;* var. 3. *Sativus.*

20. *Vernus; Wildenow.* Flore verno, tun. vaginaceâ interiore reticulatâ infra medium cormum, proximâ reticulatâ basi propiùs sed non approximatâ, (unde zona radicalis a basi distat) foliaceâ exteriore reticulatâ in fronte cormi affixâ, involucro tubato scapum laxè amplexo vaginis breviore, scapo sæpe elongato (triuncialem vidi) spathâ tubatâ acutâ ebracteatâ superne virescente tubum subæquante tubi fauce barbatâ nunquam luteâ, limbo purpureo vel albescente, styli longitudine variabili, stigmatibus capitato-multifidis croceis interdum in cultis albescentibus, foliis 3—4 marginibus tenuibus lævibus costâ canaliculis vix nervatis angustiore. *Crescit in montibus Galliæ meridionalis, Helvetiæ, Italiæ, Vindeliciæ, Carinthiæ, Podoliæ meridionalis, et Hungariæ septentrionalis. Non transit Istrum superiorem, aut mare Adriaticum; non descendit in planities; prope Cebennas crescit, in Pyrenæis rarior; a Brotero montes Beiræ habitare dicitur; si reverâ, forsan et Hispaniæ montes incolit. In Angliâ sponte crescit prope Nottingham et alibi, sed non indigena.*

Var. 1. *Neapolitanus,* flore magno sepalis purpureis, petalis plumeo-purpureis; *supra* 860. Subvar. culta *supra* 2210. In monte Calabro celsissimo *Pollino* nive tardiùs fusâ vel mense Junio floret.

Var. 2. *Albiflorus; Schult. Mant.* 1. 367; foliis 2—3, flore minore sæpiùs albo, rariùs subpurpurascente.

Subvar. 1. *Obovatus;* laciniis obovatis. *Habitat Alpes Vindeliciæ prope Saltzburg, et montes circa Tergestem. In Herbariis.*

Subvar. 2. *Acutior;* laciniis acutis. *In montibus Carinthiæ, prope Cebennas et alibi. In Herbariis.*

Var. 3. *Podolicus;* flore majore in sicco subpurpurascente. *Spec. ex Podoliâ Merid. Herb. Hooker a Besser lect.*

Var. 4. *Alpinus.* Ex Helvetiâ, flore minore, in sicco subpurpurascente.

Color et forma in cultis variat, sed vix ex stirpe violaceâ quoad vidi.

C. *autumnalis. Loisel. Poir. Enc.* 6. 558. montanus autummalis *Lob. ic.*

Vide infra ad calcem 3875.

Z.

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3.

Miss Wray del.

Pub. by S. Curtis, Glazenwood Kessex, June 1841.

ANIGOZÁNTHUS MANGLÉSII. Mr. MANGLES' ANIGOZANTHUS.

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Class and Order.

HEXANDRIA MONOGYNIA.

(Nat. Ord.—HÆMODORACEÆ.)

Generic Character.

Perianthium superum, coloratum, tubulosum, lanatum, pilis ramulosis, limbo 6-fido, laciniis subæqualibus sursum secundis; tardius deciduum. *Stamina* 6, fauce inserta, adscendentia. *Antheræ* erectæ. *Ovarium* triloculare, loculis polyspermis. *Stylus* filiformis, deciduus. *Stigma* simplex. *Capsula* trilocularis apice dehiscens. *Semina* numerosa.—Herbæ *perennes*. Radix *fasciculato-fibrosa, fibris crassis*. Caulis *integer vel superne divisus*. Folia *ensiformia, aversa, basibus semivaginantibus*. Flores *subcorymbosi, e spicis brevibus, bracteis subopposititloris*. *Br.*

Specific Character and Synonyms.

ANIGOZANTHUS * *Manglesii;* foliis lineari-acutissimis sparse ciliatis pilis deciduis, caule lanato, racemo simplici, perianthio hinc fisso limbo revoluto secundo, antheris muticis.

ANIGOZANTHUS Manglesii. *Don, in Sweet's Brit. Fl. Gard. N. S. 3. t.* 365.

(β.) *angustifolia;* foliis linearibus acuminatissimis. *Lindl. Bot. Reg. t.* 2012.

One of the most curious and beautiful productions that Australia has yet contributed to our gardens. Specimens and

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* From *ανισχω, I raise up,* and *ανθος,* a *flower.*

and seeds have been sent from the Swan River, by favor of Mr. Mangles, after whom the species is named, and from Mr. Drummond. For a specimen of the plant, and for the drawing here figured, we are indebted to Mrs. Wray of Oakfield, near Cheltenham.

Descr. *Root* perennial, formed of thickish, fasciculated fibres. The rest of the plant is herbaceous. The *leaves* are mostly confined to the base of the stem, and are equitant at the base, distichous, linear, elongated, and gradually acuminated, sometimes ciliated, but these hairs are deciduous, and when present inconspicuous: the leaves of the stem or scape, small, linear-acuminate. *Scape*, or *stem*, terete, simple, everywhere, as well as the pedicels and the ovarium, clothed with feathery hairs or long tomentum, below greenish, the rest a deep full red. *Bracteas* of the same colour, tinged with green. *Perianth* three to four inches long, velvety, rich green, tubular, split open on the underside for the whole length, pale green within: the *limb* cleft, the laciniæ secund and reflexed, often more or less combined. *Stamens* six, inserted near the top of the tube. *Anthers* linear, yellowish. *Ovary* inferior, three-celled, cells many-seeded. *Style* exserted; *stigma* clubbed, obscurely bifid.

Fig. 1. Apex of the Tube of the Perianth, with the Stamens. 2. Section of the lower part of the Tube, with the Ovary. 3. Transverse section of the Ovary:—*magnified*.

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ic. 138. eodem loco cit. circa Massiliam et alibi nullus est, neque autumnalem ullum prope Massiliam indigenam reperiri pro comperto habetur. Descr. ex *sativo* et *Pyrenæo* conflata.

Obs. *Croci* ebracteati indigenæ omnes involucrati. Bracteati 1. bracteâ loratâ. 2. bracteâ involvente. 3. bracteâ tubatâ. Bractea tubata aliquando casu in cultis dimidiata. C. *lagenæflorus* cultus inclementiâ cœli septentrionalis sæpe ebracteatus. Quæ de foliis Crocorum prædicantur, ad folia recentia, flore quoad vernos nondum effœto, pertinent. W. H.

ERRATA.

3864. 2. C. ***cancellatus,*** pro "***strictâ,***" lege "***striatâ.***

3865. Pro "***conniventi,***" lege "***conniventia.***"

—— Pro "*suboralibus,*" lege "*laciniis suboralibus.*"

Pub by S Curtis Glazenwood Essex June 1 1841

BRACHÝCOME IBERIDIFÓLIA. CANDY-TUFT-LEAVED BRACHYCOME.

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Class and Order.

SYNGENESIA SUPERFLUA.

(Nat. Ord.—COMPOSITÆ.)

Generic Character.

Capitulum multiflorum heterogamum, *fl. radii* ligulatis fœmineis uniseriatis, *disci* tubulosis 5-dentatis hermaphroditis. *Recept.* conicum subalveolatum epaleaceum. *Involucrum* campanulatum pauciseriale, squamis margine submembranaceis. *Achænium* lateraliter plano-compressum erostre, pappo subsetiformi brevissimo coronatum.—Herbæ *Novo-Hollandicæ.* Folia *alterna glabra parce dentata pinnatilobata aut trifida.* Discus *luteus (nunc atropurpureus).* Radius *albus (nunc cæruleus violaceusve.)* *D C.*

Specific Character and Synonyms.

BRACHYCOME* *iberidifolia ;* glaberrima, caule erecto ramoso, foliis pinnatisectis, segmentis lineari-subulatis distantibus integerrimis, pedunculis nudis monocephalis, involucri squamis oblongis acutiusculis apice membranaceis, achæniis subteretibus clavatis lævibus v. pilis paucis hispidulis apice plicatis, pappo subnullo. *Benth.*

BRACHYCOME iberidifolia. *Benth. in Hugel, Enum. n.* 198. *Lindl. Bot. Reg.* 1841, *t.* 9.

A beautiful annual raised from Swan River seeds by Mrs. WRAY of Cheltenham, to whom we are indebted for specimens and a drawing. The variety of colours exhibited by flowers that obviously belong to one and the same species of plant in the Swan River colony, is quite extraordinary, and

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* So named by CASSINE, from βραχυς, *short*, and κομη, *hair ;* in allusion to the short pappus of some of the species.

and is a frequent subject of remark by Mr. Drummond in his observations on the Botany of that district. Mrs. Wray observes, that she has herself raised the present Brachycome, having blossoms of every shade of blue and lustrous lilac, with considerable diversity in the size and shape of the flower heads. Professor Lindley speaks of the violet-blue and lilac (both here represented) and of the white, of all which we have native specimens in our Herbarium. The white has the flowers so like those of the common Daisy of our pastures and banks, that, except in the single row of radiate florets and the more imbricated scales of the involucre with a membranous border at their apices, we can scarcely point to any tangible generic difference. In the specimens we examined, there is clearly no pappus. Dr. Lindley describes it as consisting of two deciduous hairs, but observes that it is often wanting.

Descr. *Root*, in our native specimens, decidedly annual. *Stems* a foot high, erect, dichotomously branched, rounded. *Leaves* alternate, slender, pinnatifid, the segments narrow-linear, quite glabrous. *Capitula* solitary at the end of the numerous slender, terminal branches or peduncles, blue or purple-lilac. *Florets* of the *ray* and of the *disk* with a few, spreading, filamentous hairs on the tubular portion. *Achenium* obovate, moderately compressed and obscurely triquetrous, with a very slightly elevated rim at the top, but no pappus.

Fig. 1, 2, 3. Radial Florets from different capitula. 4. Stigma of ditto. 5. Floret from the disk. 6. Stigma from ditto. 7. Achænium. 8. Receptacle:—*all more or less magnified.*

Amaryllidaceæ.

Hippeastrum aulicum; *var.* Caraccense.

—— bulbo magno subrotundo, foliis nitidis arcuatis, scapo forti viridi, sæpius bifloro, pedunculis biuncialibus viridibus, germine subunciali trigonè oblongo viridi, perianthio quinqueunciali tubo circ. $\frac{3}{8}$-unc. viridi, limbo colore carnis salmonis costis dorsalibus crassis viridibus intus prope basim viridi maculâ vix radiatâ, marginibus inferne valdè undulatis, sepalis angustioribus acuminatioribus summâ $1\frac{1}{4}$-unc. inferioribus $1\frac{1}{8}$-unc. latis, petalis acutis superioribus $1\frac{1}{2}$-unc. latis, imâ $1\frac{1}{16}$-unc. marginibus genitalia undulatè ultra basim viridem amplexâ, genitalibus ejusdem cum perianthio coloris assurgentibus, stigmate lobis longis recurvis perianthium æquante, filamenta vix superante.

This distinct salmon-coloured variety of A. *aulicum*, embracing the filaments with the undulated margin of the lowest petal, was sent to Tho. Harris, Esq., at Kingsbury, by Mr. Mackenzie, from Caraccas, and flowered at Spofforth, in November, 1840. W. H.

W Fitch del:

Pub by S Curtis Glazenwood Essex June 1 [illegible]

Maxillária stapelioídes. Stapelia-like Maxillaria.

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Class and Order.

Gynandria Monandria.

(Nat. Ord.—Orchideæ.)

Generic Character.

Perianthium connivens, raro patens. *Sepala* lateralia cum basi columnæ connata. *Petala* subconformia. *Labellum* trilobum, cucullatum, sessile, cum basi producta columnæ articulatum. *Columna* semiteres aptera. *Anthera* subbilocularis. *Pollinia* 2, bipartibilia v. integra, caudicula brevi, glandula transversa.—Epiphytæ *(Americanæ) pseudo-bulbosæ, acaules v. caulescentes.* Folia *spicata v. coriacea.* Pedunculi *radicales, axillares v. terminales, uni- v. multiflori. Lindl.*

Specific Character and Synonyms.

Maxillaria *stapelioides;* pseudo-bulbis ovatis tetragonis 1—2-phyllis, foliis tenuibus lanceolatis patentibus pallide glaucis reticulatis, pedunculo diffuso bifloro, sepalis petalisque subrotundo-ovatis acutis patulis subæqualibus, labello oblongo trilobo, laciniis lateralibus erectis linearibus obliquis obtusis intermedia ovato-oblonga basi cucullata, crista flexuosa carnosa intus dente carnoso ovato aucta. *Lindl.*

Maxillaria stapelioides. *Link et Otto, Abbild.* III. *t.* 52. *Lindl. Gen. et Sp. Orchid. p.* 146. *Bot. Reg. v.* 25. *t.* 17.

This species of Maxillaria well deserves the name of *stapelioides* given to it by Messrs. Link and Otto: it is spotted very much after the same manner as many species of Carrion-flower, and the colours are also very similar. It

It is a native of Brazil, and was found in the Organ Mountains by Mr. Gardner, from whose plants, sent to the Glasgow Botanic Garden, our figure was taken in the autumn of 1830.

Descr. It is a small plant: the *pseudo-bulbs* grow in a tufted manner, and are ovate, four-angled, bearing generally two, terminal, broadly lanceolate, very acute, somewhat membranaceous, striated *leaves*, dark green above, paler beneath. *Scape* from the base of the bulb, spreading or pendent, one or two-flowered, with ovate, somewhat sheathing bracts. *Sepals* and *petals* ovate, acute, spreading, pale green, internally marked with transverse deep purple bands. *Lip* broadly ovate, deep black-purple in the centre and at the base, the border pale, with transverse streaks of deep purple, three-lobed; the side-lobes small, oblong, acute, the middle one large, almost orbicular, obtuse, having at the base a two-lobed crest and a broad tooth with an apiculus pointing to the base of the lip.

Fig. 1. Column. 2. Labellum. 3. Inside view of the Anther-case. 4. Pollen-masses:—*magnified.*

W. Fitch del.

Pub by S. Curtis Glaziewood Essex June 1841

Swan sc.

Dáhlia glabráta. Smooth Dwarf Dahlia.

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Class and Order.

Syngenesia Polygamia.

(Nat. Ord.—Compositæ.)

Generic Character.

Capitulum radiatum, *fl. radii* ligulatis fœmineis neutrisve, disci tubulosis 5-dentatis. *Involucrum* duplex: *ext.* squamis foliaceis 1-serialibus circ. 5 patulis reflexisve, *int.* squamis 12—16 subbiserialibus longis apice membranaceis basi crassiusculis et inter se coalitis. *Recept.* planum paleaceum, paleis membranaceis oblongis indivisis. *Styli* rami erecti aut subincurvi crassi extus piliferi. *Anth.* ecaudatæ appendiculatæ. *Achænium* oblongo-obovatum obcompressum epapposum apice obsolete bicorne.—Herbæ *Mexicanæ grandes.* Folia *opposita pinnatipartita rarius bipinnatipartita, segmentis ovatis acutis serratis.* Radices *fasciculatæ, aliis cylindricis, aliis oblongo-tuberculatis.* Rami *apice elongati nudi* 1-*cephali.* Capitula *versicolora disco nempe luteo, radio purpureo roseo albo aut flavo. D C.*

Specific Character and Synonyms.

Dahlia * *glabrata;* caule viridi glaberrimo fistuloso, foliis bipinnatis glabris superioribus linearibus indivisis, rachi alata, foliolis ovatis acutis grosse serratis ciliatis, ligulis fœmineis, involucri foliolis extimis linearibus patentibus. *Lindl.*

Dahlia glabrata. *Lindl. Bot. Reg.* 1840. *t.* 29.

I am indebted to Mr. Ferguson, the very skilful Curator of the Botanic Garden of Belfast, for beautiful specimens of this

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* So named in compliment to Andrew Dahl, a Swedish Botanist, who wrote on systems of Botany in 1787.

this Dahlia, a native of Mexico, whence its seeds, according to Professor Lindley, were obtained, by George Frederick Dickson, Esq., who presented them to the Horticultural Society of London, and stated them to be from the subfrigid districts of the country. It is a handsome species of much humbler growth than the Dahlia *variabilis*, and the foliage is less rank and weedy. It flowers in Autumn.

Descr. *Root* perennial, consisting of comparatively small, but thickish, descending, branching fibres. *Stem* herbaceous, striated or even sulcate, green, tinged with purple, glabrous, branched, fistulose, three to four feet high. *Leaves* glabrous, glossy; the lower ones bipinnate, the *leaflets* more or less ovate, inciso-serrate, or almost pinnatifid: the upper ones pinnatifid, the laciniæ incised, the uppermost linear; all of them with the rachis winged. *Peduncles* axillary and terminal, frequently branched. *Exterior involucre* green, of five linear, or subspathulate, spreading leaflets: *inner* of about eight broad, ovate ones, margined with brown. *Florets* of the *ray* about eight, broadly ovate, deep lilac purple, with five lines or striæ. *Disk* deep purple: the *stamens* and *styles* and *stigmas* orange yellow.

W Fitch del.

Pub by S Curtis Glazenwood Essex June 1 1841

MORMÓDES PARDINA ; *var.* unicolor. LEOPARD-SPOTTED MORMODES ; whole-coloured *var.*

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Class and Order.

GYNANDRIA MONANDRIA.

(Nat. Ord.—ORCHIDEÆ.)

Generic Character.

Sepalum superius fornicatum angustum ; lateralia conformia reflexa. *Petala* latiora conformia, erecta. *Labellum* sellæforme, ascendens, trilobatum, subcuneatum apiculatum, cum columna articulatum. *Columna* semiteres, muticа ; *gynizus* longus angustus ; *clinandrium* postice acuminatum. *Pollinia* 4, per paria connata, *caudiculæ* crassæ affixa, glandulæ carnosæ crassæ adhærenti.—Habitus Cataseti. *Lindl.*

Specific Character and Synonyms.

MORMODES * *pardina ;* pseudobulbis turbinatis foliis strictis 4-plo brevioribus ; racemo nutante multifloro foliis breviore, sepalis petalisque subæqualibus ovato-lanceolatis acutis conniventibus, labelli trilobi lobis lateralibus acutis decurvis intermedio elongato acuminato *Bateman.*

(α.) *maculata ;* floribus flavis purpureo-maculatis.

MORMODES *pardina. Bateman, Orchid. Mex. et Guatem. tab.* 14. *Lindl. Bot. Reg. Misc. v.* 24. *p.* 93. *n.* 176.

(β.) *unicolor ;* floribus concoloribus. (Tab. nostr. 3872.)

The spotted-flowered state of this fine and fragrant plant is figured by Mr. BATEMAN in his magnificent work above quoted; and he communicated the information to Professor LINDLEY,

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* "From μορμω, a *frightful looking object,* a goblin, in allusion to the strange appearance of the flowers" (LINDL.) in the first species that was detected.

Lindley, that shortly after M. *pardina* had flowered with him, he received from Mr. Barker specimens of a remarkable variety of it, the flowers of which were entirely self-coloured. This we take to be that particular state of the species, which was received along with the spotted variety at the Woburn gardens from Mexico by favor of Mr. Parkinson. It produces its fine racemes of blossoms, which exhale a powerful and most agreeable odour, in September, 1840.

Descr. *Pseudo-bulbs* oblong, in our specimen sheathed with the broad membranaceous scales of the lanceolate, membranaceous and strongly striated leaves. From the base of the bulb arises the *scape*, a foot and more long, including the many-flowered racemes. *Bracteas* ovate, acuminate. *Sepals* and *petals* ovate, acuminate, and, as well as the lip, concave, moderately spreading at the base, the apices directed upwards, so that they are almost connivent. *Lip* cuneate, with three acuminated lobes, two lateral ones smaller and reflexed. The colour of the whole a deep lemon-yellow. *Column* and *anther* as in Catasetum.

Fig. 1. Lip and Column. 2. Pollen-mass : *magnified.*

In consequence of the unavoidable absence of the Editor from home, the following omissions, or errors, have appeared in the recent numbers of this Work.

Tab. 3843. Æschynanthus *grandiflorus*, p. 2, l. 5, for "Mr. Sangton," read Mr. Sang.

Tab. 3849. Musa *superba*. It should have been said that the drawing was from the pencil of Dr. Greville.

Tab. 3851. Tropæolum *brachyceras*, and Tab. 3853, Pentstemon *heterophyllus*, were both from the garden of the Horticultural Society of Edinburgh.

Tab. 3860. Gardoquia *betonicoides*, p. 2, l. 2, instead of "two inches long," read "two inches and a half long.

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